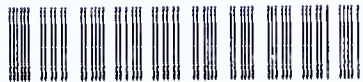


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REPORT

OF

The Giant Power Board

TO

The Governor of Pennsylvania

December 7, 1926

The Giant Power Board

Gifford Pinchot, Governor

George W. Woodruff, Attorney General

R. Y. Stuart, Secretary of Forests and Waters, Secretary

Morris L. Cooke, Consulting Engineer

Philip P. Wells, Deputy Attorney General, Chairman

HARRISBURG, PENNSYLVANIA

1927

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LETTER OF TRANSMITTAL

Pa.
HONORABLE GIFFORD PINCHOT,
GOVERNOR OF PENNSYLVANIA,
HARRISBURG, PENNSYLVANIA.

DEAR SIR:

I transmit herewith the report of the Giant Power Board created by your Executive Order of June 24, 1925, "to set the (Giant Power) problem in a clear light before the people and to co-ordinate toward its partial solution all the executive administrative authority given by existing law."

To further the first of these objects it is recommended that this report be printed.

The vision of the problem to be put before the people and the use to be made, for its partial solution, of executive and administrative authority under existing law, have been in a peculiar sense tasks of your administration, now drawing to its end. It is therefore further recommended that the Giant Power Board be now dissolved.

Very sincerely yours,

PHILIP P. WELLS

Chairman, Giant Power Board

December 7, 1926.

224199

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REPORT
of the
Giant Power Board
to
The Governor of Pennsylvania
1926

HONORABLE GIFFORD PINCHOT,
GOVERNOR OF PENNSYLVANIA,
HARRISBURG, PENNSYLVANIA.

DEAR SIR:

In your message transmitting the report of the Giant Power Survey Board to the General Assembly, Session of 1925, you said:

“Next to a supply of natural resources sufficient to feed, clothe, and shelter our people, this is the greatest of the economic questions which face the human race. I do not raise it. It has raised itself. As Pennsylvania and the Nation deal with electric power so shall we and our descendants be free men, masters of our own destinies and our own souls, or we shall be the helpless servants of the most widespread, far-reaching, and penetrating monopoly ever known. Either we must control electric power, or its masters and owners will control us.”

THE POWER PROBLEM

The power problem is but one phase of the problem of natural resources—how may they be put to use without waste and entrusted to private enterprise without oppression but with opportunity for just profit? Twenty years ago you proposed an answer in a public policy to which you gave the name—“the conservation of natural resources”. For that policy you secured the powerful support of President Roosevelt. With his backing you put it in force as to forests, as to grazing lands and, so far as possible under inadequate laws, as to water power, on a large part of the vast domain owned by the Federal Government in the West. You proposed new laws for the disposal of the mineral fuels and fertilizers in

the national public domain and of the water power on the national public domain and in navigable rivers. You kept these proposals before Congress and the country until their enactment in the Potash Leasing Act, the General Mineral Leasing Act of 1920, and the Federal Water Power Act of 1920. It was the privilege of the undersigned to be associated with you in this work. The Pennsylvania Giant Power program is but its latest phase.

THE FEDERAL WATER POWER ACT

The Federal Water Power Act governs the disposal of three-fourths of the water power resources of the United States. By imposing conditions on the Federal license to develop water power on lands of the United States and in navigable rivers it set up a new economic policy. The heart of that policy is that licenses shall be limited to a maximum term of fifty years, at the end of which the property may be taken over by the Government or be handed over to a new licensee upon the payment of the "net investment" in the project, defined as "the actual legitimate cost thereof Provided, That such net investment shall not include or be affected by the value of any lands, rights of way, or other property of the United States licensed by the commission under this Act, by the license, or by good will, going value, or prospective revenues: Provided further, That the values allowed for water rights, rights of way, lands, or interest in lands shall not be in excess of the actual reasonable cost thereof at the time of acquisition by the licensee."

This provision of the license contract is a charter of liberties for the people of all the states because it rescues three-quarters of their water power resources from the application of the unjust legal rule that a public service corporation is entitled to a return upon the increase in the value of water rights and other natural resources entrusted to it as the agent of the people for their service—an increase not due to any investment, sacrifice or service by the corporation, but solely due either to the enlarged necessities of the people by reason of increased numbers and a higher standard of living or to a decreased supply of power resources. But for this beneficent provision of the Federal Water Power Act and its counterpart in state statutes the value of a water power would be measured by the value of the competing fuel source of power—coal, which must increase as the coal deposits are progressively exhausted. This was illustrated by the attempt to guarantee for the Conowingo project future increases in the price of the electric current output in proportion to future increases in the price of coal, an attempt which failed, as stated later in this report.

The peculiar circumstances of that project enabled you to appeal to the Federal Power Commission for the protection of citizens of

Pennsylvania denied to them by their own laws. But in the great majority of water power projects the Federal Water Power Act passes on to the states the duty of regulating the licensee by provisions requiring him, under penalty of forfeiture of the license, to abide by regulation of rates, service and security issues by the Public Service Commission of the State, and making the "net investment" the basis upon which must be calculated the "fair return" to which the public utility is entitled. Only in the event that any state fails to empower its public service commission to regulate rates, service or security issues, is the Federal Power Commission empowered to do so and only to the extent of such failure.

THE GIANT POWER BOARD

By the Limited Power Permit Act of June 14, 1923, P. L. 704 you secured the extension of the "net investment" principle to all the meager water power resources of Pennsylvania thereafter developed for use in public electric service. By the Giant Power Bills you sought to secure its extension over steam-generated public utility power, to effect other needed reforms in the regulation of rates, service and security issues, to encourage cheap mass-production at the source (the coal-fields) and cheap mass transportation by long-distance high-tension transmission to the load centers (practices common in the utilization of the great water powers of the Pacific Slope and Rocky Mountains) and to require the establishment of a state-wide power pool in such fashion as to secure for the consumers the great cheapening of current attainable by pooling.

After the first defeat of the Giant Power Bills you created this Board by your letter of June 24, 1925 (Appendix I) "to set the problem in a clear light before the people and to co-ordinate toward its partial solution all the executive and administrative authority given by existing law".

All members of the Board except Mr. Cooke have been throughout their tenure officers of the Commonwealth. Mr. Cooke, who was the Director of the Giant Power Survey under the former Board generously contributed much time and thought, also the extensive use of his office in Philadelphia to the work of the Board, for all of which the Commonwealth is under an obligation of gratitude to him.

FINANCES AND EMPLOYED PERSONNEL

By an arrangement between the Budget Officer and the Public Service Commission under the Administrative Code there were transferred from the salary roll of the Public Service Commission to that of the Department of Property and Supplies, as of July 16, 1925, employees rendering custodial service to the Commission at

\$480 per month. This was done to enable the Commission to employ expert assistance for studies within its powers and desired by the Giant Power Board. For such studies there have been employed by the Commission:—

Mr. Otto M. Rau from June 28, 1925 to date @ \$300 per month.

Henry N. Woolman Jr. from July 7, 1925 to July 31, 1926, @ \$125 per month.

Ernest Bradford for the lump sum of \$250.

Ralph E. Haines from November 9, 1926 to date, @ \$1 per hour.

The following table shows an accrued unexpended balance from this source as of November 30, 1926 of \$1054 and an estimated accrued unexpended balance as of January 15, 1927 of \$1324, (from which should be deducted the amount earned by Mr. Haines).

Money Available to the Public Service Commission for Work of The Giant Power Board Due to Arrangement to Furnish Janitor Service to the Public Service Commission.

			Available for Use	Amount Used	Balance for Month	Total Amount Accrued
1925						
Nov. 30	Unexpended Balance					\$144
Dec. 31	Rau	\$300	\$480	\$425	\$55	199
	Woolman	125	.....	.....	.....	.....
1926						
Jan. 31	Rau	300	480	425	55	254
	Woolman	125	.....	.....	.....	.....
	Bradford's Report			250		4
Feb. 28	Rau	300	480	425	55	59
	Woolman	125	.....	.....	.....	.....
Mar. 31	Rau	300	480	425	55	114
	Woolman	125	.....	.....	.....	.....
Apr. 30	Rau	300	480	425	55	169
	Woolman	125	.....	.....	.....	.....
May 31	Rau	300	480	425	55	224
	Woolman	125	.....	.....	.....	.....
June 30	Rau	300	480	425	55	279
	Woolman	125	.....	.....	.....	.....
July 31	Rau	300	480	425	55	334
	Woolman	125	.....	.....	.....	.....
Aug. 31	Rau	300	480	300	180	514
Sept. 30	Rau	300	480	300	180	694
Oct. 31	Rau	300	480	300	180	874
Nov. 30	Rau	300	480	300	180	1,054
Dec. 31	Rau	300	480	300	180	1,234
Jan. 15	Rau	300	480	300	180	1,324

MEETINGS AND CONFERENCES

At the outset the Board agreed that for the doing of the task set by you it should proceed by discussion with a view to the meeting of minds but without formal requests for specific action by existing state agencies.

Experience proved that such discussion could best be carried on by informal conferences among members of the Board as the need arose rather than in formal meetings and that method has, in general, been followed.

LEGISLATION PROPOSED IN 1925

To carry out the recommendations of the Giant Power Survey Board nineteen bills were prepared in the Department of Justice, introduced in the House at the regular Session of 1925 and referred to the Committee on Manufactures (House Bill Nos. 1040-1057 and 1360-1363).

If analyzed from the point of view of benefits conferred and burdens imposed on the companies these bills proposed to change existing law in 28 particulars. Of these changes 7 enlarged the privileges of the companies, 8 imposed no burdens on them, 2 were essential to preserve state control over interstate transmission, 5 imposed very light burdens on the companies, 2 enabled farmers to organize effectively for buying current at wholesale and distributing it to themselves at their own expense; and only 4 provided for more stringent regulation.

Nevertheless legislative counsel for the Pennsylvania Electric Association stated openly to the Committee that the companies were opposed to every one of the bills and every item in them. In view of the strength of this opposition the efforts of the Administration were concentrated upon the bill to continue the Giant Power Survey Board (No. 1043) and the two farmers' bills (Nos. 1361 and 1363). At the Committee hearing the companies centered their attack on the engineering aspects of the bills for incorporating Giant Power companies (No. 1056) and for controlling them by permits from the Giant Power Board (No. 1054). Evidence was introduced to show that the proposed Giant Power plants in the coalfields to deliver current over 220,000 volt transmission lines to the load centers in the eastern part of the State either could not be operated at all, or if operated, could not compete with plants at the seaboard. That this argument was a blind to divert the attention of the committee and of the public from the real objections of the companies is clear because there was nothing in the bills calling for the expenditure of a single dollar of either public or private money in nine-month plants or 220,000 volt lines. The bills simply author-

ized the organization of corporations for that purpose and gave them powers suitable to accomplish it, if feasible. If not clearly feasible so as to promise profit to private investors no money would be invested in giant power plants. Therefore the existing electric companies would have had no interest in the question and would have saved themselves the expense and trouble of opposing the legislation.

REASONS FOR OPPOSITION BY THE COMPANIES

The true reasons for their opposition were three. *First*, they dreaded, as a precedent, the proposed fifty-year time limit for permits to Giant Power companies and the restriction of their earnings to a fair return on the money actually invested in them as shown by properly supervised accounts. *Second*, the existing companies wished to defeat the bill for compulsory pooling (No. 1057) for the same reasons that moved the railroads to oppose legislation requiring interconnection and the interchange of traffic half a century ago. *Third*, they wished to defeat the grant of enlarged regulatory powers to the Public Service Commission and the setting up of new and just standards of regulation (Bill No. 1047). The heart of that bill was in the three principles: (a) that the "fair return" to which the investor is entitled should be calculated upon the amount of money prudently invested in the property as shown by properly supervised accounting. (This principle governs all electric power generated by water power under the Federal Water Power Act, whether used in Pennsylvania or elsewhere; also—since the passage of the Act of June 11, 1923, P. L. 700—all other public utility power generated in Pennsylvania from water power); (b) that the total par value of stocks and bonds should be equal to this rate-base. (This has been the law of Massachusetts for a generation); and (c) that the "fair return" should be varied from time to time so as to be enough to keep the common stock of a well managed company slightly above par in the stock market, but no more than enough for that purpose. (This principle was appealed to by the American Telephone and Telegraph Company in the period of high interest rates after the War to justify an increase of dividend from eight to nine per cent which carried the market price of the stock from slightly below to slightly above par and was followed by the issue of new stock to finance extensions. If this principle had been in effect during the period of high interest and high prices following the war it would have saved many utilities from bankruptcy and all from injustice and hardship). The effective adoption of these three principles would abolish at a blow the practice of basing the "fair return" upon the value of the property *at the time of*

regulation as shown by inventory and expert estimate. This practice is a violation of economic and a perversion of legal principles. It subjects every consumer to an ever increasing price burden by reason of increased demand through the growth of the population and through its intelligence, energy and labor in raising the standard of living; also by reason of decreased supply of the natural resources through exhaustion. It makes the consumer and the utility gamblers on the fluctuating general price level. It gives the utility in every disputed case an unfair and great advantage over the public in the service of specially trained lawyers, engineers and accountants. It is enormously expensive and the consumer pays the expense of both sides, win or lose, because the expense of the utility is an operating expense which must be paid out of the rates. It ignores the principle of competition operating through the law of supply and demand at the only point where it can be applied to public utility monopolies, namely, at the point where the monopoly must compete in the security market for new capital. It is necessarily time consuming beyond measure, and for this reason it cannot be worked in practice for the state-wide and constant regulation of rates. Even if the personnel and expenses of the Commission were multiplied by twenty it could never keep up with the task. As it is, nearly all utility rates are unregulated nearly all the time.

A fourth reason for opposition by the companies ought to be added: They did not wish the abolition of the "twilight zone" of interstate transmission where they are not regulated by Federal authority and cannot be regulated by state authority.

THE 1926 BILLS

The Board selected the seven most important bills for introduction in the extraordinary session of 1925, with some changes. They dealt with the Giant Power Board and giant power companies (3 bills); the state-wide pooling of electric service (1 bill); the regulation of electric service (1 bill); electric service to farmers (2 bills). They were introduced in the Senate (Senate Bills Nos. 31-37) and referred to the Committee on Corporations.

No. 31 would create a Giant Power Board with the same investigative powers that were given to the Giant Power Survey Board in 1923. The other bills would give the Board wide regulative and supervisory powers as to the development and use of the power resources of the Commonwealth.

No. 32 would amend the Corporation Act to permit the creation of Giant Power Companies, public service generating companies and public service transmission companies, give to the Giant Power

companies and the transmission companies the right to condemn for their use such land as the Giant Power Board finds necessary and prohibit any taking of land by any electric company without such a finding of necessity. The provision of the 1925 bills giving Giant Power companies the right to condemn leaseholds in coal land was omitted.

No. 37 would give the Board authority to issue to Giant Power companies 50-year permits without which they cannot do business. They would operate steam stations of very large capacity (300,000 kilowatts minimum) in or near the coal fields, recover the by-products of coal before burning it, sell by-products, operate transmission lines of very large capacity (110,000 volts minimum) crossing the State from west to east and connecting with existing company lines. They would sell current only to electric companies of the usual type, but these would be obligated by other bills to sell this current to consumers at reasonable prices. The organization of Giant Power companies and the taking of Giant Power permits by them would be left wholly to private initiative. There is nothing whatever compulsory about this part of the legislation. It merely seeks to make attractive to business enterprise this kind of large-scale power development, and to assure benefits to consumers if private initiative does develop this type of business.

The Giant Power plan includes the integration of electric service throughout the State, that is, the creation of one state-wide power pool into which all producers will pour their output and from which all consumers will take current. The first step to such pooling is the interconnection of all major electric systems by means of their connections with the state-crossing Giant Power lines. The 1925 pooling bill would have completed the state-wide pool by making each major transmission system a common carrier of current from generating plants (sellers) to local distribution systems (buyers). Therefore it would have required the transmission business, formally segregated from the business of generation and distribution, to be entrusted to separate corporations which were forbidden to buy, sell, or distribute current. Because of criticism of this segregation requirement the fourth 1926 bill (No. 36) would bring about pooling by imposing on the operators of transmission lines the duty of purchasing without discrimination from all producers and the duty of delivery without discrimination to all distributing systems, whether operated by themselves or by others. To make this possible the Board would divide the whole state into transmission districts in accordance with existing major transmission systems so that every acre in the State will be in some one district. Each system must assume this duty of common purchaser and common seller for its district, so that the entire State would thus be

able to get current from the major transmission systems which in turn could get it from the Giant Power companies.

The fifth (regulating) bill of 1926 (No. 34) was substantially the same as the 1925 bill above discussed.

The sixth and seventh bills were unchanged from the 1925 bills. They would give to farmers the privilege of building their own distribution systems, of connecting these lines, at their own expense, with any company's transmission line, and of purchasing current at wholesale at the average cost of generation and distribution over the selling company's whole system, unless this connection and service should reduce the average daily busy time ("capacity factor") of the selling system, in which case the wholesale price would be equitably increased. Under the sixth bill (No. 33) farm service would be through incorporated electric districts, under the seventh (No. 35) through mutual electric companies. The districts would be public ownership units specially created by referendum vote of the landowners (a 60 per cent majority). The mutual companies would be privately owned and operated primarily for the service of their stockholders. The districts and the mutual companies would bear the whole cost of distribution. Neither could be organized in territory which was otherwise adequately served.

The hearings on the bills before the joint legislative committees (Senate Corporations and House Manufactures) held in the Senate Chamber January 26 and February 2, 1926, were printed in a pamphlet of one hundred and three pages. The advocates of the bills put in evidence proving conclusively the enormous profits of large holding companies controlling power companies operating in Pennsylvania. During the hearings Professor Lincoln, head of the Electrical Engineering Department of Cornell University testifying for the companies, stated on cross examination that he had never made a study and recommended as feasible a giant power plant in the coal fields of Pennsylvania, transmitting the energy thus developed to a load center in the Eastern part of the state over a transmission line of 220,000 volts pressure. He was confronted with a report made by him in 1919 in which he had made such a recommendation after investigation. He explained his denial by saying that he had forgotten his study and report.

The vigorous opposition of the companies again killed all the bills in committee.

For a better understanding of the Giant Power legislation there are appended to this report the Report of the Giant Power Survey Board to the General Assembly, Session of 1925, recommending the legislation in its original form; also a paper by the undersigned published in the National Municipal Review of October, 1926, and which is here submitted as a brief, clear and comprehensive state-

ment of the Giant Power proposals as revised in details to date; also the text of the Giant Power Bills (Appendices II, III, IV).

RURAL ELECTRIC SERVICE

"An abundant and cheap supply of electric currentfor the farms of this Commonwealth" was one of the objects expressed in the Act of May 24, 1923, P. L. 449, providing for the Giant Power Survey. Though nearly all the area of the State is within the charter limits of the companies, which have thereby assumed the burden of supplying this "chartered territory" with power, the survey found less than six per cent. of the farms in the State receiving utility power.

For this, two practices of the companies were responsible—that of requiring the farmer to pay, in whole or in part, the cost of constructing the extension built to serve him, and that of fixing rural rates so high as to discourage large use by farmers. The contributions exacted for the construction of rural extensions were inexplicable upon any common principle. The rural rates seem generally to have followed the principle laid down by the sixth paragraph of the Rural Lines Code of the National Electric Light Association (Electrical World Nov. 17, 1923), namely: "Rates for rural service shall be regular city rates plus a rural charge." This ignores the fact that the farmer should be looked at as a power consumer rather than a light consumer, needing current for his home and farm far beyond the requirements of the city man having an equal standard of living. The Giant Power Bills would have met the farmer's peculiar needs by the following measures: Provisions in the regulation bill (No. 1047, Session of 1925) empowering the Public Service Commission to set a uniform standard of rates or of the methods of computing them; cancellation of power company charters as to territory not now served and not likely to be served in the near future, this to be done by administrative action after due notice and hearing; authorizing the setting up by the farmers in unserved territory of local distribution systems to buy current at wholesale and distribute it to themselves at cost, either through new local public ownership organizations called rural electric districts or through new distributing corporations organized on the co-operative principle (one man—one vote; profits to be divided in proportion to the current consumed).

Upon the defeat of these measures in the Session of 1925, the Giant Power Board took up the task of relieving the farmers under existing law. Long drawn out hearings were held by the Public Service Commission upon a tentative order requiring the companies to build such lines, and establishing a uniform standard of the rates to be charged to farmers throughout the state, subject to exceptions

upon proof to the Commission that compliance with the order would work hardships upon any particular company. In spite of the vigorous opposition of the companies, the Commission on January 12, 1926, issued the order known as General Order No. 27. It standardized the duty of the companies to make and build extensions. Under it every company must build extensions upon the demand of farmers who pledge themselves to take service over the new lines. Every separate mile of line for which there are three or more consumers so pledged in advance is to be built at the company's expense without contribution from the farmers. For every separate mile for which there are less than three consumers pledged in advance, the company must pay toward the cost of construction \$300 for each such pledged consumer.

The order did not fix any standard rate, because the regulation bill above mentioned giving it authority to do so had been defeated by the companies. They attempted to have the order set aside by an appeal to the Superior Court, which was thrown out. Many of them now proceeded to nullify the order by filing schedules of rates so high that farmers would not pledge themselves to take service. Upon the advice of the Board you urged the Public Service Commission to attack these rate schedules by a proceeding undertaken on the Complaint of the Commission itself, but up to this time, the Commission has done nothing along that line. Nevertheless General Order No. 27 is a very important advance step in rural electrification. Farmers who can by any means afford to take the service should pledge themselves to do so and secure the construction of the lines. Such a pledge would bind them for only one year, and once they are taking service they will be in a much better position to demand properly low rates than they are when they are not taking service. It is interesting to note that many of the companies which have neglected their duty to serve farmers in their chartered territory have sought to obtain new charters in new territory, much of which they have no present intention of serving. Such applications in large numbers are now pending before you. The advice of the Board thereon awaits information from the Public Service Commission, requested October 16, 1926, as to the level of the rates charged in schedules filed under General Order No. 27 by those existing companies which are respectively interested in the several applications. Examples of such rates per hundred kilowatt hours are shown by a table prepared in the Bureau of Engineering of the Public Service Commission as a part of a report on operations under General Order No. 27.

Copies of the Order and of said table are appended to this report (Appendices V and VI).

CONOWINGO PROJECT REGULATION

Notwithstanding the fact that the power companies succeeded in defeating the Giant Power Bills and so prevented the granting of authority to the Public Service Commission to regulate security issues and the limitation of the par value of all securities to the amount of money prudently invested, you succeeded in having this principle applied to the great water power development on the Susquehanna River for the supply of electricity to Philadelphia. In the Federal Water Power Act it is provided that where electric power coming from a water power project built under Federal license enters into interstate commerce the Commissions of the two states concerned are authorized to regulate rates, service and security issues to the extent that they are empowered by state laws and are in agreement. So far as they are not empowered or do not agree, the Federal Power Commission is required to regulate these matters. The dam and power house of the Conowingo project are to be in Maryland. Land in Maryland and Pennsylvania is to be flooded by the dam. The power is to be transmitted across the Pennsylvania-Maryland state line for the supply of Philadelphia. The bankers financing the project proposed to issue enough bonds and preferred stocks to pay the entire estimated cost and in addition 94,200 shares of "no par" common stock of Classes A and B. All the voting power of the corporation was to be concentrated in Class B common stock, which would not have contributed a dollar to the enterprise. You therefore requested the Federal Power Commission to limit the par of bonds and stock to the estimated cost of the project, to disallow the issue of any "no par" stock and to disallow non-voting stock. The Federal Power Commission took the action that you requested as to prohibiting "no par" stock and limiting the par of bonds and stocks to the actual investment.

The Federal Water Power Act of itself establishes the "prudent investment" rate base for this project, and the proposals of the company that the price paid by the consumers for the electricity generated by this great water power should increase with future increase in the price of coal was therefore rejected. Your fourteen years fight for the enactment of this statute has saved the people of Philadelphia from this extortion, and the fixing of the security par as equal to the net investment by the action of the Federal Power Commission on your initiative (the first action of the kind taken by that Commission) has saved them from the deception as to actual investment which is the purpose and effect of security inflation.

Copies of your correspondence with the Federal Power Commission on this subject are appended to this report (Appendix VII).

The saving in rates secured for the people of Philadelphia by your leadership in this matter is conservatively estimated at one million dollars per year.

STUDIES OF THE INTER-CORPORATE RELATIONS AND FINANCING OF POWER COMPANIES

From Moody's Manual of Public Utilities, the Wall Street Journal, the Commercial and Financial Chronicle, the Electrical World and occasional items appearing in other journals the Board undertook the compilation of a card index of authoritative current information about the financing and inter-corporate relations of power companies and other related topics. This was continued until the resignation of Mr. Woolman, effective August 1st, 1926. A memorandum thus compiled was submitted January 26th, 1926, to the joint legislative committee considering the Giant Power Bills of 1926. It is referred to at page 7 of the printed hearings entitled: "Giant Power: Proceedings before the Committee on Corporations of the Senate and the Manufactures Committee of the House of Representatives, being a Joint Hearing on Senate Giant Power Bills, Numbers 32, 33, 34, 35, 36 and 37, Extraordinary Session of 1926." It shows the increase in value from 1920 to 1925, of common stocks of ten holding companies having subsidiaries operating electric utilities in Pennsylvania. From the high stock market prices of 1920, to the high prices of 1925, the stock of these holding companies, outstanding in 1920, had an average increase in value of one hundred and ninety six per cent (195.96%). The value of the stock of one of them (The American Water Works and Electric Company), outstanding in 1920, increased ten thousand two hundred and fourteen percent (10,213.9%). A copy of this memorandum is attached to this report (Appendix VIII).

STUDIES OF THE "SPREAD" OF RATES CHARGED TO DIFFERENT CLASSES OF CONSUMERS AND OF THE COST OF SERVING EACH CLASS

From data submitted by the companies to the Public Service Commission in response to a questionnaire, and from the annual reports of the companies to the commission for the year 1924, the Board caused studies to be made by Mr. Otto M. Rau, as to the "spread" of electric rates (difference in money charge to different classes of consumers for equal amounts of current) and of the cost incurred by the companies for serving each class. These studies are attached to this report (Appendices IX and X). They are believed to be the first of their kind and to lay the foundation for scientific rate-making. What is pretentionally called "rate structure"

by the companies is in fact largely the hap-hazard survival of the customs of the industry as developed from the early days when lighting was the only service rendered and was necessarily expensive, through the later period of competition which reduced the rates to other classes of users but left the householder to the sole protection of regulation by the commissions. It is noteworthy that "effort was made to obtain from the electric power utilities in the State the allocation of costs by which they arrived at the charges for service as per schedules filed with the Bureau of Rates and Tariffs." The practical result was an almost general admission by the companies that no such allocation of costs could be made, and that the rate schedules were not arrived at by consideration of comparative costs but from experience and competition. The contentions therefore are fully sustained that rates do not reflect costs and that where no *competition* exists the highest rates are charged, and where there is competition rates sufficiently low to get the business are made, irrespective of the cost to serve. Moreover "the reports" (of the companies) "to the Public Service Commission as now submitted are not classified so as to give the data necessary for allotting costs to rate schedules."

Mr. Rau's studies show:

That the peak load of the state-wide pool which would have resulted from the passage of the Giant Power Bills would occur between 8 and 12 o'clock in the morning throughout the year.

That domestic service is largely off-peak and should be rated as such.

That the cost to serve small consumers is only three times that of serving large consumers but that the former are commonly charged ten times as much as the latter for the same unit of current, and that this discrimination against the small consumer should be corrected.

That rates should be standardized and based upon the cost to serve each class of consumers.

That with every rate schedule there should be filed an allocation of costs showing in detail the cost to the company of furnishing the service covered by the schedule.

That the form of annual reports required from the companies should show accurate allocation of costs to serve each class of consumers, the amount of fixed capital devoted to generation, transmission, and distribution respectively, the load factor, and the capacity factor.

That the annual reports and the rate schedules should be abstracted and tabulated by the Commission and kept up to date

for ready reference, so that analysis of new rates as filed can be given prompt and effective attention.

REGULATION OF INTERSTATE COMMERCE IN ELECTRIC POWER

The Supreme Court of the United States has not yet passed upon the regulation of the transmission of power from one state to another, but nearly all qualified students of the subject look for the extension to this field of the rules laid down by that court upon the carriage of oil and gas by pipe-line, of news by telegraph, and of passenger and freight traffic by motor bus lines. Under these rules all power transmission across state lines in whatever quantity and to whomsoever delivered is interstate commerce which may be regulated by Congress.

As to interstate transmission of electric power generated by water power under a license from the Federal Power Commission, Congress has set up a scheme of regulation in section 20 of the Federal Water Power Act of 1920. (Rates, service, and security issues of interstate transmitters to be regulated by the commissions of the States concerned so far as they are empowered and agree, but insofar as they lack power or are not agreed regulation to be done by the Federal Power Commission). As to all other interstate transmission of electric power Congress has done nothing. It follows that in all cases where the transmitter across the state boundary itself delivers the power directly to the consumer, the regulatory commission of the receiving state can regulate the interstate transmission until Congress undertakes the task. But if the transmitter delivers the power to a distributing company in the receiving state which in turn sells to the consumer neither that state nor any other can regulate the interstate business between the two companies notwithstanding Congress does nothing about it.

Interstate transmission is destined to grow rapidly. For Pennsylvania the exports already amount to seven per cent of the production and the imports eight per cent. In North Carolina the percentages are much larger. The necessity of protecting the consumer by regulation of this "twilight zone" was recognized by the report of the Power Committee of the New England Conference at Hartford, November 18, 1926, with the concurrence of cooperating representatives of the New England power industry and of the regulatory commissions of those states.

The report of the Giant Power Survey Board in 1925 advocated the undertaking by the states on their own initiative of the regulation of this new form of interstate commerce rather than leaving it to Congress. The procedure proposed was the making of interstate

compacts with the approval of Congress under Article 1, section 10 of the Constitution of the United States.

The matter was taken up informally by a member of the present Giant Power Board with the Governors of New York and New Jersey with the result that the three Governors, by a statement released to the press Monday morning October 26, 1925, announced that they had appointed commissioners constituting a joint Giant Power Commission to negotiate such a compact for submission to the Legislatures of the three states. Three members of the Giant Power Board (Philip P. Wells, Clyde L. King, and Morris L. Cooke) were designated for this duty by the Board. The representatives of New York were William A. Pendergast, chairman, George R. Lum, member, and Charles R. Vanneman, chief engineer, of the New York Public Service Commission. Those of New Jersey were Dr. Charles Browne, member of the Board of Public Utility Commissioners of New Jersey, Isaac Alpern and Robert F. Engle, well known business men.

The joint Giant Power Commission organized at Princeton, New Jersey, October 31, 1925. Dr. Browne was elected chairman, Mr. Pendergast vice chairman, and Mr. Wells Secretary. An executive committee was set up consisting of the chairman with Messrs. Vanneman, Engle and Wells. At the request of the Joint Commission the Governors of the three negotiating states severally invited the Governors of other states upon their borders each to appoint a representative to act with the Joint Commission as observers and advisers. This was done with a view to protecting the interests of the adjacent states, securing their cooperation and criticism and seeking their future joinder in the compact. In response to these invitations observers and advisers were appointed for the adjacent states as follows:

Ohio: Grover C. Maxwell, formerly Secretary of the Public Service Commission. Technical and Engineering adviser; A. B. Roberts, former Director of Public Utilities for the city of Cleveland.

West Virginia: Gray Silver.

Maryland: Harold M. West, Chairman of the Public Service Commission.

Connecticut: William E. Putman.

Rhode Island: William C. Bliss, Chairman of the Public Utilities Commission.

Massachusetts: Henry H. Attwill, Chairman, Department of Public Utilities.

Vermont: Edward H. Deavitt, Commissioner of Finance.

The Vermont representative attended the second, third, and fourth (final) meetings of the Joint Commission; the Maryland representative the second and fourth meetings, and the Massachusetts representative the fourth meeting. These gentlemen all participated fully and helpfully in the discussion of the Joint Commission.

The Pennsylvania Commissioners proposed an outline of a compact in the form of principles to be embodied therein. In part these were amended by the Executive Committee at two meetings held in New York, November 9th and 23rd, 1925, Messrs. Pendergast and Cooke meeting with the committee. In part the Pennsylvania proposals were submitted directly to the Joint Commission at the second meeting held in Philadelphia, December 5, 1925. That meeting, also the third meeting held in Trenton, December 12, 1925 and the fourth (final) meeting held in New York, December 21, 1925 were largely given up to the discussion of these proposals, which are embodied in the minutes. They included: The setting up of a joint tribunal with power, (as to interstate transmission): to regulate service standards as arbitrator of differences between the commissions of two compact states; to regulate the accounting, rates, service and security issues of all companies doing interstate power business, with liberty however to each state to compel, and to each company to bring about, the segregation of interstate transmission business in separately organized corporations; the rate-base to be the amount prudently invested in the enterprise; par of security issues to equal the rate base; no par securities to be prohibited; the fair return to be computed and tentatively fixed at the sum necessary to enable a properly financed company under efficient management to pay prudently as dividends on its common stock a sum sufficient to keep it slightly above par in a normal market, reserving the right to any company thereafter to demand a valuation so far as necessary to comply with the controlling rulings of the courts; the construction or enlargement of interstate facilities and the enlargement of existing interstate business over existing facilities by a corporation to be conditioned upon an agreement by the corporation to accept the "Prudent investment" rate base; difference in the cost of service to different classes of consumers to be the basis of different rates for such service; all interstate business to be conducted by corporations organized under the laws of some one of the contracting states; voting of stock in any operating companies of the contracting states by or for holding companies not organized under the laws of one of them prohibited; orders for the production of books, accounts etc. issued by the regulatory commission of any one of the contracting states to have full effect in the other contracting states; interlocking directorates restricted; taxation of interstate utilities not to be affected.

Two of the commissioners from New York opposed the making of any compact and at the final meeting (December 21, 1925) upon a motion by Dr. King (Pennsylvania) a vote was taken on the question whether a compact was desirable. The question carried in the affirmative, New Jersey and Pennsylvania voting in the affirmative, New York in the negative. Thereafter the New York Commissioners withdrew from the negotiations which have not since been renewed.

The Pennsylvania proposals to the Joint Giant Power Commission are believed to be the first constructive attempt to provide by State initiative for the regulation of interstate power service.

The minutes of the Joint Commission and a map of holding company territory in the three states are appended to this report (Appendices XI and XII).

Respectfully submitted,

PHILIP P. WELLS,
Chairman.

December 7, 1926.

Appendix I.

Report of the Giant Power Board

1926

EXECUTIVE ORDER CREATING THE GIANT POWER BOARD

Hon. George W. Woodruff, Attorney General.
Hon. Clyde L. King,¹ Secretary of the Commonwealth.
Hon. R. Y. Stuart, Secretary of Forests and Waters.
Hon. Harold Evans,¹ Public Service Commission.
Hon. Morris L. Cooke, 1713 Samson St., Philadelphia.
Hon. Philip P. Wells, Deputy Attorney General.

Gentlemen:

The situation created by the defeat of all Giant Power legislation by the influence of the power companies makes it necessary to co-ordinate the activities under existing laws of the several Executive Departments and administrative agencies of the Commonwealth with respect to the public service of electric current. You are, therefore, hereby designated to act with me for this purpose under the name of the Giant Power Board of which I shall myself be a member.

Mr. Philip P. Wells is hereby designated as Chairman of this Giant Power Board.

In my message to the General Assembly at its last session transmitting the report of the Giant Power Survey Board, I summarized

¹Public Service Commissioner Richard W. Martin was added to the Board December 9, 1925. The membership of Mr. Evans terminated January 19, 1926, that of Mr. Martin September 15, 1926 and that of Dr. King October 15, 1926, the dates when their terms as Public Service Commissioners and Secretary of the Commonwealth ended.

the most important of the essentials recommended by that Report for securing cheap and abundant universal power service, as follows:

"First: Mass production, with opportunity for by-product recovery.

"Second: The creation of a common pool of power into which current from all sources will be poured, and out of which current for all uses may be taken.

"Third: Free access by every water power and steam generating station to every potential purchaser, which means every distributing system in the State which supplies the consumer.

"Fourth: Complete, prompt, and effective regulation of rates, service and security issues.

"Fifth: Rescue of the regulation of electric service from the destruction now threatened by its conversion into interstate commerce, which will be beyond the control of the states and has not been regulated by Congress.

"Sixth: Systematic extension of service lines throughout the rural districts."

The legislation prepared for securing these essentials included twenty-six (26) items which may be classified as follows:

Enlarging the privileges of the companies	7
Imposing no additional burdens on the companies	8
Preserving State Control from Federal encroachment..	2
Imposing slight burdens upon the companies	5
Inducing service to farmers	2
Providing more stringent regulations of the companies	4

28

The spokesman for the companies declared their opposition to every one of the bills and to every item in every one of them. This opposition resulted in the failure of all of the bills.

As I said in my message:

"No one who studies the electrical developments already achieved and those planned for the immediate future can doubt that a unified electrical monopoly extending into every part of this Nation is inevitable in the very near future. The question before us is not whether there shall be such a monopoly: That we cannot prevent. The question is whether we shall regulate it or whether it shall regulate us.

"It is almost impossible to imagine the force and intimacy with which such a monopoly will touch and affect, for good or evil, the life of every citizen. The time is fully in sight when every household operation from heating and cooking to sweeping and sewing will be performed by the aid of electrical power; when every article on the average man's breakfast table—every item of his clothing—every piece of his furniture—every tool of his trade—that he himself did not produce, will have been manufactured or transported by electric power; when the home, the farm, and the factory will be electrically lighted, heated, and operated; when from morning to night, from the cradle to the grave, electric service will enter at every moment and from

every direction into the daily life of every man, woman, and child in America."

The problem of giant power, its coming and its control in the public interest, transcends every other economic issue now before the people of the Commonwealth and of the United States at large, except the greater issue of which it is but a part, namely: the conservation of and common rights in natural resources.

The Administration offered a full solution of this problem through new legislation. The electric companies refused to discuss any item of the legislation in a constructive spirit and prevented the enactment of any part of it. For this result they must accept responsibility. It will be our common task as members of the Giant Power Board to set the problem in a clear light before the people and to coordinate toward its partial solution all the executive and administrative authority given by existing law.

Very truly yours,

GIFFORD PINCHOT

Appendix II.

REPORT OF THE GIANT POWER SURVEY BOARD TO THE GENERAL ASSEMBLY OF PENNSYLVANIA (1925)

(With notes showing the bills introduced in 1925 and 1926 to carry out the recommendations.)

To the Honorable the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met:

The Giant Power Survey Act of May 24, 1923, P. L. 449, placed upon this Board two tasks: An outline survey of the facts; and the recommendation of a policy that will "best secure for the industries, railroads, farms and homes of this Commonwealth an abundant and cheap supply of electric current." The survey and conclusions upon the facts are embodied in the Director's report herewith transmitted and the accompanying technical papers. Having considered the facts so found in the light of sound economic principles, after inviting suggestions from outstanding men connected with the public service electric industry in Pennsylvania, we have deduced and here recommend the main outlines of policy and refer for details to Mr. Wells' paper "Proposals for legislation" which follows the technical reports.

Public power policy must, in Pennsylvania, be concerned chiefly with electric current produced by steam from the rich bituminous coal deposits in the Western part of the State. Water power supplied only 11 per cent of the 4.25 billion kilowatt hours consumed in the State in 1922, and this percentage must decrease notwithstanding additional quantities that will be brought in from hydro-electric sources beyond our borders and the more intensive development of our own waterpowers which is beginning under the sound legislation of 1923. This legislation has worked well but should be supplemented in minor particulars.

The most important legislative stimulus to intensive water power development would be a statute to put beyond a doubt the legality of

the merger and consolidation of hydro-electric and steam-electric generating companies under proper restrictions. This we recommend.¹

Turning then to the generation of electricity by steam: The essentials are five in number, namely:

1. Adequate public agencies obligated to a scrupulous regard for investors' rights as the surest means of attracting the constant stream of new capital necessary for rapid expansion, but adequately empowered to control and guide this stream toward the social ends easily within reach.
2. Mass production, which means "abundant and cheap" production, at the sources of raw material.
3. Mass transportation, which means "abundant and cheap" transportation, to all parts of the Commonwealth by an integrated system of transmission lines.
4. Effective, simple and stimulating regulation from the coal mine to the power consumer, which means the passing on of the abundance and cheapness to him.
5. Fair and justly regulated interchange of power with other states, which means increased abundance and cheapness.

No one of these essentials now exists in fact or is adequately provided for by our law.

1. For the adequate public agencies we recommend:

(a) The creation of a permanent Giant Power Board in the Department of Forests and Waters to carry on the study of the problem and to direct the application of the natural resources (coal deposits) to state-wide electric service through a competent technical staff, with an appropriation of \$150,000 for the first fiscal biennium.² The Board should have power to establish standards of equipment for the electrification of steam railroads in Pennsylvania.³

(b) Such enlargement of the powers of the Public Service Commission as will enable it to control adequately at all points the financial and commercial operation of electric facilities. The particulars are given under the fourth essential below.

2. To secure the cheapness and abundance of mass production in the coal fields, with the added economies of by-product recovery, we recommend:

(a) Legislation authorizing the incorporation of giant power generating and giant power transmission companies empowered to do the following things, if and as prescribed in writing by permit from the Giant Power Board, namely: The generating companies:⁴

To construct and operate in the coal fields steam electric stations of not less than 300,000 kilowatts capacity (the minimum size limit indicated for profitable by-product recovery);⁵

To mine coal;⁵

¹1925 H. R. 1360.

²1925 H. R. 1043; See 1926 S. 31.

³1925 H. R. 1043 Sec. 2, To investigate and recommend only; See 1926 S. 31.

⁴Note: 1925 H. R. 1056 (Incorporation) and 1054 (Permits) each company to generate and transmit. See 1926 S. 32 and 37.

⁵1925 H. R. 1056 and 1054. See 1926 S. 32 and 37.

To sell, as an incident to the electric generating business, coal more suitable for by-product recovery elsewhere than in the electric generating station;⁶

To appropriate by condemnation process the right to mine coal on specific lands not to exceed an area reasonably estimated to be sufficient to supply the generating station for not more than 50 years, just compensation to be fixed at the time of appropriation in the form of royalty and secured before the taking;⁷

To make and sell coke, gas, other by-products of coal and chemicals;⁸

To sell at wholesale electric current to public service electric companies for distribution by them in Pennsylvania⁹ and for transmission to other states under compacts negotiated as recommended in Section 5, paragraph (e) of this report;

To purchase surplus current from other generating stations.¹⁰

The giant power transmission companies should be common carriers of the current purchased and produced by the giant power generating companies.¹⁰ For this purpose they should be empowered to operate giant power transmission lines of not less than 110,000 volts capacity on locations so fixed by the Giant Power Board as to secure the best inter-connection with and service to other common carrier transmission lines;¹¹ for such transmission lines to purchase and condemn rights of way¹¹ and to occupy and use under permit strips of land belonging to the Commonwealth designated by the Board or acquired in fee simple by it through purchase or condemnation.¹² The cost of acquisition could probably be met from year to year without the use of the State's credit and the preliminary work of location would preclude any expenditure under this head during the next fiscal biennium.

(b) That the Giant Power Board be authorized to issue permits for the construction and operation of giant power generating stations and transmission lines, for the conduct of by-product and other incidental business,¹³ and for occupancy and use of the lands of the Commonwealth in such land strips for transmission lines, gas pipelines, oil pipelines and other appropriate uses¹⁴. Permits should be limited to a maximum period of 50 years and conditioned upon the right of the Commonwealth, or another permittee designated by the Commonwealth, to take over and operate the works at the expiration of such period upon payment to the permittee of the money prudently invested on the faith of the permit.¹⁵ For the right to occupy and use lands of the Commonwealth the permit should fix an annual charge with a view to amortizing the cost of the land strips within not more than 50 years.¹⁶

3. To secure cheap mass transportation throughout the Commonwealth we recommend, in addition to what has already been said about giant power transmission lines:

⁶1925 H. R. 1056 and 1054. See 1926 S. 32 and 37.

⁷1925 H. R. 1362.

⁸1925 H. R. 1056 and 1054. See 1926 S. 32 and 37.

⁹1925 H. R. 1056 and 1054, Sec 9 (f) to Public Service Distribution Systems only) See 1926 S. and 37.

¹⁰Common purchaser—not carrier 1925 H. R. 1054, Sec. 9 (g).

¹¹1925 H. R. 1056 and 1054. See 1926 S. 32 and 37.

¹²1925 H. R. 1048.

¹³1925 H. R. 1054. See 1926 S. 37.

¹⁴1925 H. R. 1048.

¹⁵1925 H. R. 1054 Sec. 9 (d) (f) (e); See 1926 S. 37.

¹⁶1925 H. R. 1048.

(a) That all other public service power business be segregated into three separate classes: (1) major generation; (2) major transmission; and (3) distribution, including minor transmission; also that no corporation be allowed to do more than one of these three kinds of business. For the dividing line between major and minor generation we recommend a capacity of 25,000 kw., and for that between major and minor transmission a pressure of 50,000 volts or a capacity of 25,000 kw. whichever is the greater.¹⁷

(b) That the Giant Power Board be required to divide the state into transmission districts on the basis of present facilities and future needs as they may arise or be foreseen from time to time,¹⁸ that every major transmission system be constituted a common carrier for the transmission district in which it lies with the duty of taking electric current of standard voltage and frequency from all public service generating stations (including hydro-electric stations) in the district, and delivering it to all consignees which are public service distributing systems in the district, on terms subject to regulation by the Public Service Commission.¹⁹ With the approval or on the order of the Commission and, on terms thereby fixed, exchange of current with the transmission lines of other districts should also take place.²⁰

(c) That two new classes of distribution systems be authorized by law,—rural electric districts and mutual electric companies. The districts should be created with power to furnish current to their inhabitants upon the favorable votes of a sufficient majority of inhabitants and of the owners of a sufficient majority of the acreage; also with power to tax, assess benefits and damages, finance construction work, etc.²¹ Mutual electric companies should be formed by the voluntary association of consumers.²² The districts and the mutual companies should be served by the major transmission lines of the district within which they lie on equal terms with other distributing systems and should have made available to them expert advice and guidance from the State College.²³

4. To secure effective regulation that will pass down to the consumer the cheapness and abundance of mass production and mass transmission, in addition to the control provided by the giant power company permits and the control of condemnation above mentioned, we recommend:

(a) That the powers of the Public Service Commission be enlarged to include, as to electric power, the regulation (with reformation of contracts) of:

Contracts for construction, lease and management;²⁴

Contracts of brokerage or agency in respect of procuring contracts of construction, lease or management;²⁴

Contracts, facilities, service, prices and rates between common carrier power companies and all others from and to whom they are authorized or required to receive and deliver current as above or hereinafter recommended;²⁴

¹⁷1925 H. R. 1057 Only transmission segregated (Sec. 5); See 1926 S. 36.

¹⁸1925 H. R. 1057 Sec. 6-9; See 1926 S. 36.

¹⁹1925 H. R. 1057 Sec. 3 (from "all shippers"); See 1926 S. 36.

²⁰1925 H. R. 1057 Sec. 3 (no approval required); See 1926 S. 36.

²¹1925 H. R. 1361; See 1926 S. 33.

²²1925 H. R. 1363; See 1926 S. 35.

²³1925 H. R. 1361 and 1363, advice by Giant Power Board See 1926 S. 33 and 35.

²⁴1925 H. R. 1047, Sec. 6 (e) and Sec. 9; See 1926 S. 34.

Accounting as to all matters mentioned in this discussion of regulation;²⁵

Future security issues including the price, not less than par, at which issued;²⁶

Maintenance of facilities with due provision for depreciation, amortization and other proper reserves.²⁷

(b) That the basis of rate regulation for giant power generating and transmission companies be the amount of money hereafter prudently invested therein.²⁸

(c) That as to all other public service generating companies, transmission companies, and distributing companies, hereafter created or merged, including owner and lessor companies or either of them as well as operating and lessee companies, or either of them, and as to all other power companies hereafter exercising the right of condemnation, the basis of rate regulation shall be the amount of money prudently invested after January 1, 1926, plus the value as of that date of all property then used and useful in their public service; that acceptance of this rate base, in the form required by the Public Service Commission, shall be a part of the application for and a condition of every charter, merger or consolidation hereafter issued or authorized; that like acceptance shall be part of every application hereafter made for every preliminary finding of necessity for such condemnation, and shall for all purposes be deemed to be a condition precedent to, and to have been agreed to before, every taking by such condemnation for public use hereafter made with or without such preliminary finding.²⁹

(d) That no securities shall be hereafter issued by any giant power generating or transmission company or by any other public service power company without the prior approval of the Public Service Commission. All stock hereafter so issued shall have a fixed par value approved before issue by the Public Service Commission upon a finding that the total par value of any such issue is not in excess of the money which has been or is to be paid for the same at the time of issue or in excess of the value of the property or services exchanged or to be exchanged for the same at the time of issue, and that the application of such money or property made or proposed constitutes a prudent investment.³⁰

(e) That rates, prices and transmission charges imposed by Giant power companies,³¹ common carrier transmission companies and other public service power companies shall be so regulated that the rates of any company as a whole shall provide a sufficient reasonably estimated return to attract into the enterprise new capital in sufficient volume to meet the needs of its public service duty, and if they do as a whole so provide no part of them shall be deemed to be confiscatory.³² The acceptance of this principle should hereafter be a part of every application for and a condition of every charter, merger, consolidation, exercise of the right of eminent domain, and

²⁵1925 H. R. 1047, Sec. 6 (h); See 1926 S. 34.

²⁶1925 H. R. 1047, Sec. 4 (g) and Sec. 7. See 1926 S. 34.

²⁷1925 H. R. 1047 See 1926 S. 34.

²⁸1925 H. R. 1047 Sec. 3 and 5. See 1926 S. 34.

²⁹1925 H. R. 1054 Sec. 9 (f) See 1926 S. 37.

³⁰1925 H. R. 1047 Sections 3, 4, 5, See 1926 S. 34.

³¹1925 H. R. 1047 Sec. 7. See 1926 S. 34.

³²1925 H. R. 1047 Sec. 4. See 1926 S. 34.

³³1925 H. R. 1047 Sections 3, 4, 5, See 1926 S. 34.

authorization for the issue of securities, as above recommended with respect to the adoption of the prudent investment rate-base.³²

(f) That rates of distributing companies operating high-cost generating stations and desiring to substitute cheaper current delivered by a common carrier transmission company may be fixed by regulation to provide, so far as necessary, for the amortization within a reasonable time of all or part of the generating equipment to be disused.³³

(g) That the Public Service Commission be empowered to authorize or reasonably require the extension of any distributing system, including minor transmission lines, to any unserved territory within the same transmission district, notwithstanding that such unserved territory is within the territorial charter limits of another company.³⁴

(h) That the power of the courts to review the proceedings, findings and orders of the Public Service Commission be by statute reduced to the lowest terms consistent with the limitations of the State and Federal Constitutions.

5. To secure fair and justly regulated interchange of electric current with other states we recommend:

(a) That corporations generating, transmitting, or distributing electric current in Pennsylvania be prohibited to distribute current in another state at retail except to present customers in quantities fixed by existing contracts or to new customers in quantities not greater and at present points of delivery.³⁵

(b) That a like prohibition be extended to deliveries in another state at wholesale over minor interstate lines (i. e. those of less than 50,000 volts or 25,000 kw. capacity) with like exceptions as to deliveries made over existing minor lines to present customers in quantities fixed by existing contracts or to new customers in quantities not greater and at present points of delivery.³⁵

(c) That a like prohibition be extended to wholesale deliveries in another state over existing or future major interstate lines which shall not have been authorized by permit from the Giant Power Board in pursuance of an interstate compact as recommended below, with like exceptions as to deliveries over existing major lines not so authorized; that the enlargement of existing minor interstate lines to the capacity of major lines without such permit be prohibited; and that the construction of new minor interstate lines be absolutely prohibited.³⁵

(d) That existing contracts by any such corporation being a public service company, or by any other entity whatever defined by the laws of Pennsylvania as a public service company, for the delivery in another state of current transmitted or conveyed thither from Pennsylvania, shall be subject to regulation and reformation by the Public Service Commission of Pennsylvania to prevent discrimination in facilities, service or rates in favor of customers in other states and against customers in Pennsylvania;³⁶ also that future contracts of like kind by all such public service corporations or entities, for delivery over lines not authorized by permit as recommended below

³²1925 H. R. 1047 Sec. 6 (b) See 1926 S. 34.

³⁴1925 H. R. 1047 Sec. 6. (d) Annual charter rights for inadequately served territory See 1926 S. 21.

³⁵1925 H. R. 1044 Sec. 4 and 5.

³⁶1925 H. R. 1044 Sec. 6.

be prohibited, except contracts renewing existing contracts without increase of the quantity to be delivered, and except those for continuing delivery without increase of quantity to existing customers or at existing points of delivery;³⁶ also that such future contracts not so prohibited be subject to regulation and reformation as above recommended for existing contracts.³⁶

(e) That the Giant Power Board be authorized to negotiate with the representatives of other states compacts for ratification by the legislatures of the respective states and for approval by Congress under Article I, Section 10, paragraph 3 of the Federal Constitution, for the regulation of interstate electric transmission on principles of mutuality, equality, justice and efficiency;³⁷ also to grant permits for the construction of major interstate lines under such compacts.³⁸

Respectfully submitted,

GIFFORD PINCHOT, *Governor*

GEORGE W. WOODRUFF, *Attorney General*

ROBERT Y. STUART, *Sec'y Forests and Waters*

WM. D. B. AINEY, *Chairman, Public Ser. Comm.*

FRANK P. WILLITS, *Sec'y of Agriculture*

RICHARD H. LANSBURGH, *Sec'y Labor and Industry*

GEORGE H. ASHLEY, *State Geologist*

PHILIP P. WELLS, *Deputy Attorney General*

ROBERT H. FERNALD, *Engineer*

Appendix III.

GIANT POWER¹

By PHILIP P. WELLS

Deputy Attorney General, Commonwealth of Pennsylvania

(A plan for private ownership under reasonable and attainable regulation)

He who would understand the power problem in economics and politics should begin with the address of Steinmetz before the Franklin Institute a dozen years ago. With masterly clearness and brevity it showed that electricity, by giving mankind, for the first time in history, the means of transporting energy, would create a new economic order. It foretold not only the regional systems that we now see in the making, but also the future nation-wide electric network which will bring power, as the steamship and railroad bring goods, to every man's door, in any desired quantity, of standard form and quality, and at standard prices. It warned us against a repetition of the blunders and abuses of the era of railroad expansion. From the fact that electricity cannot be stored

³⁷1925 H. R. 1046.

³⁸1925 H. R. 1044 Sec. 3.

²Reprinted with permission from National Municipal Review, Vol. XV, No. 10, October, 1926.

³This paper contains a brief comprehensive statement of the Pennsylvania Giant Power proposals of 1925 as amended in the bills introduced in the Pennsylvania Senate in 1926.

it deduced the unique necessity of complete monopoly in electric service, because when all power demands are supplied from a single pool of power we have the maximum diversity of use and thereby the nearest approximation to keeping the equipment busy all the time (in technical terms the highest "capacity factor").

We are dealing with the disposal and use of natural resources and the supply of their products in public service. The power resources are falling water and coal (for in a long view petroleum and natural gas may be neglected). Electric current generated by water power and that generated by steam are identical in physics and economics, but under our laws the rights of the public over the two power sources are very different. What is wanted is a sound economic plan of disposal, use and regulation, with adequate legal devices to make it effective both as to water power and as to coal power.

Running water is not susceptible of private ownership, and although it may be the subject matter of limited private rights the sovereign states retain large powers over it. By reason of the federal authority over navigable rivers as highways of interstate commerce and of federal land ownership of the water power sites in the mountains of the West, federal license is necessary for the development of three-fourths of the undeveloped water power of the country. The Federal Water Power Act of 1920, by imposing conditions on the license, has set up a new economic policy.

State authorization for the use of the stream is the first requisite for a federal license. States and municipalities are preferred as licensees to all other applicants and exempted from rental charges. Licenses are limited to fifty years, after which the site and works may be "recaptured" by the government on payment of the net investment. Full and prompt development is required. Licensees must contribute equitably to up-stream storage reservoirs in proportion to the benefit of increased flow derived from them. Private licensees pay a nominal rent plus all profits in excess of a fair return on the net investment. They must submit to regulation of rates, service and security issues by the proper state agency; or by the Federal Power Commission where and to the extent that no state agency is empowered, or if and so far as the agencies of two or more states disagree as to the regulation of the output in interstate commerce. The net investment must be taken as the rate-base for purposes of state regulation of rates.

REGIONS WITH LITTLE WATER POWER

The greater part of the power demand of the northeastern states must be supplied by coal now in private ownership. Neither state nor nation has authority over its disposal like that over water power, but by offering liberal charters corporations may be induced to undertake large scale power development in the coal fields for state-wide supply, and to these charters may be attached conditions like those of the Federal Water Power Act. Proposed legislation of this kind in Pennsylvania would allow the incorporation of giant power companies with extraordinary powers: To build and operate generating stations of great size in the coal fields, also lines of very high voltage and very great capacity; to transmit the output for sale to major power utilities of the ordinary type; as an incident

to these operations, to condemn lease-holds in coal deposits; to condemn other property; to recover by-products of coal before burning and sell the same; to sell coal as a means of disposing of the higher grades while reserving the lower for by-product recovery and power production; to purchase surplus power from all producers at fair prices not exceeding the cost of production in the giant power stations;—all these powers to be exercised under state permits like federal water power licenses (50 year term, recapture at the end of the term upon payment of the net investment, public control of service, security issues and rates, the par of all securities issued not to exceed the net investment, the fair return to be computed upon the net investment as the "rate-base," etc.).

Giant power plants (steam-electric) so operated should be able, in the course of time, to carry the base-load of a state having little water power, such as Pennsylvania; also to deliver energy to the major transmission systems of the ordinary type at a price lower than the present cost of generation in the relatively small units now in service.

HOW THE SYSTEMS SHOULD BE ORGANIZED

Since electric service is essentially a monopoly which should be regionally organized to obtain power at the lowest possible cost by constituting each region a single pool of power into which all output is poured and from which all power consumption is drawn, public policy should seek means to induce or compel pooling and to control the resulting monopoly. The first step to this end is to make each state a single pool of power, the second to unite the state pools in a regional pool. To obtain a state-wide power pool with a minimum of interference with the company systems that have been or may hereafter be built up, each state should be divided by administrative authority into districts, upon the basis of existing and future major transmission lines, so that every acre of the state is within some one district. Let us call them transmission districts. Upon the operator of each such line, whom we may call the transmitter, should be imposed the duty of supplying all power demands within his transmission district through local public service distribution systems, whether owned by the transmitter, by other private owners, or by the public. In other words the transmitter will be a public utility for the service at wholesale of current at cost to all distribution systems in the district, including his own, without discrimination among them. He may generate his own current but should of course purchase it to the extent that he can obtain it in that manner more cheaply. In states having large coal deposits or great water powers his base-load requirements can probably best be met by reliance upon the companies engaged in mass production at the source; in other states by the importation of the output of such mass-producing companies.

Upon the transmitter should be imposed the further duty of a common purchaser of surplus power from all producers in the transmission district to the amount of the demands by the local distribution systems upon the transmitter and at rates regulated by public authority, but in no case higher than the transmitter's own cost

of generation or the cost to him of wholesale current from mass producers at the source.

Thus each transmission district will be a pool of power into which all power produced therein is poured and from which all demands are supplied, but the burden of supplying territory not now served will be generally left to local initiative in the construction and operation of local distribution systems. All these district pools will be united in a single state-wide pool by interconnection with each other and with the mass producers at the source.

The problem of unserved territory is, in the main, the problem of rural electric service. Most of this territory is within the monopolistic charter limits of companies which, as a matter of fact, are not serving it. Whether the charter holders cannot or will not serve it is immaterial. Charters should be annulled as to territory not served and not likely to be served in the near future, this by administrative procedure after due notice and hearing. This would put an end to speculation in paper charters by destroying their nuisance value. It would deprive the charter-holder of nothing substantial that he should rightfully have.

As to territory remaining within charter limits, the company should be required to serve it at cost.³ To this end the public service commission should standardize the duty of making extensions, including the contribution, if any, to construction cost, that should be made by the persons served; and should also standardize both the form and the amount of the rates to be paid for the service. Its authority should be enlarged by statute to the extent necessary for these purposes.

As to territory not chartered, or within limits where former charter rights are annulled, the burden of distribution should be thrown on local enterprise. The state should authorize the creation of rural electric districts for the service of their inhabitants under local public ownership, these to have taxing and borrowing power; also of mutual electric companies for the service of their members, and incidentally of others, upon the co-operative principle (one-man-one-vote; division of profits among members in proportion to consumption of power). To each such locality should be left the choice between the district form and the co-operative form of local organization. The transmitter should be required to serve current at wholesale to both rural electric districts and mutual electric companies at the average cost to the transmitter of generation (or purchase) and transmission over his whole system, plus such additional payment as may be equitable in cases, if any there be, where service to the rural company lowers the capacity factor of the transmitter.

EFFECTIVE REGULATION

The beneficial working of a privately owned state-wide power pool so constituted depends on effective regulation. Under this head notable changes in existing practice are essential to success. As an initial step many matters not now generally within the scope of regulation should be brought under it. The restriction of commission jurisdiction to the regulation of operating companies only is a serious defect. Upon what principle is an owner of facilities which he has dedicated to the public service and leased to an operator, thus

avoiding all risk and responsibility, exempted from the restriction of his profit to a fair return? How can there be effective regulation when the real corporate authority, the holding company, hides behind the operating company and so escapes all responsibility? Lessor companies and holding companies must be brought within the scope of regulations; also contracts of promotion, construction and brokerage. Continuing contracts of lease, management and the like must be brought under continuing supervision by empowering the public service commission to reform them as justice to the parties and the public may from time to time require.

Coming to the regulation of the operator as to service, security issues and rates: With respect to service the authority of the state commissions comes nearest to adequacy. Nevertheless the Pennsylvania Electric Association recently denied the authority of the commission to exercise its initiative by standardizing the duty of the companies to extend service to farms and the duty to pay the whole or a part of the construction cost of the extensions. Such authority and initiative should be put beyond the question by whatever statutory amendments may be necessary.

RATE BASE MUST BE CLARIFIED

A fundamental defect in the present method of rate regulations is the rule imposed by the supreme court of the United States whereby the base upon which the company's "fair return" is to be estimated by the state commissions in rate making is not the amount invested in the property but its value at the time of regulation. The "rate-base" is a variable, fluctuating with every increase of land and resource value, every hypothetical change in current construction costs for labor and for the material found in the structures and equipment at the time of regulation. In making this far-fetched deduction from the clause of the Fourteenth Amendment to the federal constitution which forbids the states to deprive any person of life, liberty or property without due process of law, the supreme court was conveniently vague as to the method of computing present value. It enumerated a list of elements of value which must be considered, even including among them—an economic absurdity—the par value of outstanding securities. But subsequent decisions and practice have emphasized more and more reconstruction cost less depreciation, until rate-making by commissions has come to turn almost exclusively upon an estimate of the cost, as of the time of regulation, of initiating the enterprise, acquiring the property and reconstructing the work, together with an estimate, as of the said time, of the deduction to be made for depreciation. Upon the rate-base so estimated, the commission fixes a rate estimated to yield in the future a sum equivalent to estimated operation and maintenance charges plus proper fixed charges plus estimated depreciation allowances plus a fair return on the rate-base. This fair return tends to become a constant percentage of the variable rate-base, as for example in Pennsylvania seven per cent.

Of this valuation procedure I have elsewhere said: "Such a method of determining the rate-base is extremely difficult, slow, costly, uncertain, hypothetical, provocative of controversy in the making and unstable when made. It wastes in expenses and fees of attorneys

and valuation engineers money which the consumers ultimately pay. It wastes something far more important still—the time, energy and attention of managers, public service commissioners and others which ought to be devoted to improving the service. It fosters misunderstanding and ill will. It should be replaced by a method easy, prompt, cheap, certain and factual.”

For a convincing exposition of the fallacies, legal and economic, underlying the valuation method of estimating the rate-base, the reader is referred to the dissenting opinion of Mr. Justice Brandies in *Southwestern Bell Telephone Company vs. Public Service Commission*, 262 U. S. 270, 290. I will not repeat his reasoning here except to point out that this method is pregnant with disaster to the companies and to their service in a period of falling prices.

But even if the valuation procedure were wholly sound in economic and legal theory it should nevertheless be discarded for the simple practical reason that it cannot be worked. Our need is for a procedure tending to exert constant pressure upon every company, taking the place of the pressure of competition in non-monopolistic business which may be likened to the constant and all pervasive pressure of the air in the physical world. Multiply the personnel and expenditure of the commissions by twenty, and by a much higher factor the controversial waste of ability, energy and the consumer's money (for in this kind of litigation he pays not only his own lawyers and engineers but the company's too) and yet the commissions could never get around to constant regulation of the rates of all utilities in the state. In other words the utilities on the average fix their own rates without any regulation, say nineteen-twentieths of the time.

NEW CHARTERS GIVE OPPORTUNITY TO GOVERNMENT

Notwithstanding the finality of federal supreme court decisions until the court achieves a better mind, there is a way of escape open to the states which they have successfully followed before in other matters. The corporate form of organization is essential to public utility business. The corporation is a creature of the state and the creator could destroy its creature by charter repeal, thus throwing the ownership of the utility property back into the copartnership form. All the states escaped the intolerable consequences of the *Dartmouth College Case*, which declared corporate charters to be contracts between the state and the corporation, inviolable under the clause of the federal constitution forbidding the states to make any law impairing the obligation of contracts. They did so by embodying in all future charter contracts an express provision reserving to the state the right to repeal the charter.

But repeal of power company charters at this time is unnecessary and unwise. New charters of merger, consolidation, etc., are required by the process of regional organization now in full tide. Moreover, the companies have great need to exercise the right to condemn property (eminent domain) which right they must get from the state. Therefore, to impose a rule of rate-base determination sound in economics and practical in working, the state needs only to refuse new charters except upon a condition that the company accept the new rule as a condition of its charter or as a con-

tract condition upon the future exercise of the right of eminent domain or upon the acceptance of other aid from the sovereignty of the state or its political subdivisions.

For this there is precedent in the Federal Water Power Act which requires the licensee to contract with the federal government that his rate-base for the purpose of state regulation shall be his actual net investment in the project as shown by his books under strictly supervised and revealing accounting. This is the "prudent investment" of Justice Brandies' phrasing. As to existing investments a valuation would have to be made as of the date when the new system went into effect.

SECURITY ISSUES AND FAIR RETURN

Future security issues should be regulated by the states so that the par of outstanding securities should at all times equal the rate-base. This also is a rule set up by the Federal Water Power Act, and the settled rule in Massachusetts for a generation has been similar. It is demanded by the necessity for public knowledge of and good will toward this vital public business. No constitutional obstacles stand in the way of its adoption. It automatically bars "no-par" stock. Non-voting stock, carrying as it does the possibility of complete separation of risk from control and from the enterpriser's profit, should be strictly limited so that the total par of non-voting securities, whether stock or bonds, should not exceed a safe fraction—say two thirds—of the net investment. Under the procedure proposed the rate-base and the par value of outstanding securities, except as increased from time to time by new investment, would be a constant quantity instead of a variable as at present.

The fair return, on the other hand, should be a variable instead of being approximately, and illogically, constant as at present. For the fair return we can find a gauge or governor, almost automatic, responding almost constantly to the economic pressure of the moment. Reflection upon Steinmetz' address before the Franklin Institute, and upon general economic principles, will carry conviction that the test of rates as to fairness to the investor and the public is whether or not they will yield enough, and no more than is necessary, to attract to a well managed enterprise the constant inflow of capital investment necessary for the healthy expansion of the business to meet public demands for service. That is not a question to be determined by elaborate inventory, hypothetical assumption, time-consuming estimate and expensive controversy. It is a question of economic fact to which the security market gives a daily answer. For here, at last, the public utility business is not monopolistic but competitive. It must compete for capital in the security market.

Therefore, upon the rate-base shown by the company's books ("net investment") the commission should from time to time fix a rate estimated to yield in the immediate future a sum equivalent to fixed charges plus operation and maintenance charges and proper depreciation allowances (estimated in the same way as under the present procedure) plus such amount as would enable the company to pay dividends at a rate sufficient to keep its stock slightly above par in the market. For this standard of a fair return we have a

precedent in the widely heralded action and argument of the American Telephone and Telegraph Company shortly after the Great War. An increase of the dividend rate from eight to nine per cent was proposed on the ground that at the old rate the stock was below par and new stock could not be sold at par to meet the needs of the company and the public for new facilities. The dividend was therefore advanced to nine per cent, the stock responded by rising slightly above par, and a large issue of new stock was offered by the company and taken by the investing public.

So much for rate regulation in general—the “fair return.” The task of rate classification, equitable adjustment among different classes of users, remains. The classes should be few and simple so that the public may understand this public business. The rate for each class should, in general, be based on the comparative cost of generation, transmission and distribution, separately computed, and properly chargeable to each class. But nevertheless a discount should be allowed for off-peak loads⁴ in order to increase the capacity factor and so lower the cost to all users. All question of further adjustment to secure social ends, such as decentralization of population, may well be postponed until experience has shown the effects of such an application of the cost principle. The commissions should be given authority and initiative for the standardization of rate structure and of rates by classes.

Finally, court review of the commission's action should be cut down to the lowest limits consistent with the protection of constitutional rights. Only when the company is deprived of a fair return on its business as a whole should the courts intervene.

INTERSTATE COMPACT

So much for regulation within each state-wide power pool. But the regional power organization must include a number of states, at least in the northeast. That is to say, regional organization involves interstate commerce not within the regulatory authority of any single state. Federal regulation of interstate commerce, by regions, differing as among the several regions, though perhaps not unconstitutional, is unattainable.

The states, however, may secure it by compacts among themselves made effective by the consent of congress as provided in the federal constitution. It would seem necessary to set up by interstate compact regional regulatory commissions. They should apply the same principles of regulation as those above outlined for the states. They should have exclusive jurisdiction over all public utility power companies doing any interstate business, but the companies should have the option to segregate their interstate transmission business into separate corporate ownership, and the states should have authority to compel such segregation, thus limiting the jurisdiction of the regional commission to the lowest terms. The regional commission should also have power to prevent discrimination in wholesale rates and service against the interstate power utilities in favor of those operating wholly within any one state.

⁴i. e. night loads in Pennsylvania the state-wide pool created by the measures here proposed would carry its peak-load in the morning.

To guard against the evils of irresponsible holding companies the commission of each compact-bound state should have power to compel the production, from any place within the region, of evidence, including accounts and other documents, as to holding companies incorporated in any other compact-bound state; and the voting of stock in an owning or operating company of any compact-bound state by a holding company not incorporated in one of the compact-bound states, or by any director, officer or agent of such a holding company, should be prohibited.

Given such a system of state and regional regulation, adequate universal electric service on terms fair to the investor and to the public could be expected under private ownership.

Appendix IV.

THE GIANT POWER BILLS¹

PREFATORY NOTE

In 1925, at the regular session of the General Assembly, 19 bills embodying the Giant Power legislative proposals were introduced in the House of Representatives. These bills were numbered from 1043 to 1057 inclusive, and from 1360 to 1363 inclusive.

At the Extraordinary Session in 1926, 7 bills were introduced in the Senate. These correspond with 7 of the House of Representative Bills that had been used in 1925. The Senate Bills were numbered from 31 to 37 inclusive.

Senate Bill 31 corresponds to House Bill 1043

Senate Bill 32 corresponds to House Bill 1056, Sections 1 and 2
and 1051, Sections 3, 4
and 5.

Senate Bill 33 corresponds to House Bill 1361

Senate Bill 34 corresponds to House Bill 1047

Senate Bill 35 corresponds to House Bill 1363

Senate Bill 36 corresponds to House Bill 1057

Senate Bill 37 corresponds to House Bill 1054

To prevent tiresome repetition definitions common to two or more of the Giant Power Bills are printed at the beginning of this compilation under the heading "Standard Definitions" and are not repeated in the several bills, where the reader will find their places supplied by references to the Standard Definitions. Those definitions which appear in only one bill are retained there.

In this compilation the bills are further abbreviated by substituting a brief descriptive title for the full title.

Following the "Standard Definitions" the 7 Senate Bills of 1926 are printed with notes showing how they differ from the corresponding House Bills of 1925. After these follow the House Bills of 1925, which had no corresponding Senate Bills in 1926.

(¹) Compiled by R. E. Haines.

The form and number of the original bills is in part due to the provisions of the Constitution of Pennsylvania requiring the subject of every bill to be stated in its title and forbidding the treatment of more than one subject in any one bill.

A. STANDARD DEFINITIONS

Used in the Giant Power Bills of 1925 and 1926, With Notes Showing Changes in the Definitions used in the 1926 bills from those used in the corresponding 1925 bills.

The figures in brackets following each definition refer to the bills in which the definition appears.

"S" indicates that the bill was introduced in the Senate.

"HR" indicates that the bill was introduced in the House.

The "additional fair value" of the property of an electric utility on any day of computation means: first, the fair value, as of the thirty-first day of December one thousand nine hundred and twenty-five, of the property of such electric utility, if any, used and useful in its public service on said thirty-first day, which, on the day of computation was so used, and had until then been maintained so that its condition of useableness on said thirty-first day and its expectation period of useableness, as of said thirty-first day remained undiminished on the day of computation, or, if not so undiminished, the "additional fair value" means, such fair value, as of said thirty-first day, less the cost estimated by the Commission as of the day of computation of restoring such property to said standard of maintenance, or second any sum agreed upon, in lieu, of such computation by the Commission and such utility before, on, or after, and as of the day of computation. (1925 HR 1044; 1926 S 34.)

"Board" means the Giant Power Board in the Department of Forests and Waters. (1925 HR 1044, 1047, 1048; 1051, 1052, 1054, 1057, 1361, 1362, 1363; 1926 S 32, 33, 34, 35, 36, 37).

"Commission" means the Public Service Commission of the Commonwealth of Pennsylvania. (1925 HR 1047, 1054, 1057, 1361, 1363; 1926 S 33, 34, 35, 36, 37.)

"Common carrier transmission company" means a corporation incorporated under the laws of this Commonwealth for the common carriage from all shippers to public service distribution systems of electric current for light, heat, and power, or any of them. (1925 HR 1047, 1057, 1361, 1363; omitted in 1926.)

"Connecting carrier" means the operator of a public service transmission system in Pennsylvania, or, so far as from time to time authorized by law, in other states, operating under an obligation to, or offering and able to, receive from the operator of such a system obligated as a common carrier by this Act, to transmit, and to deliver electric current on its way between the shipper and the consignee. (1925 HR 1057, omitted in 1926.)

"Consignee" means the operator of a public service distribution system in Pennsylvania, designated by the shipper to receive, and willing and able to receive current from a major public service transmission system operating as a common carrier under this Act. (1925 HR 1057; omitted in 1926.)

"Distribution system" means a line or a number of substantially parallel lines of wire or cable constituting one or more electric circuits or an electrically interconnected network of such lines and the appurtenant structures whether or not any of such lines be a transmission line all operated as a¹ unit under one business control² for the main purpose of delivering directly to consumers electric current for light, heat, and power, or any of them. (1925 HR 1047, 1054, 1057, 1361, 1363; 1926 S 32, 33, 34, 35, 36, 37.)

"District territory" means all the land included within an incorporated electric district. (1925 HR 1361; 1926 S 33.)

"Electric meeting" of an incorporated electric district means a meeting of the qualified district electors of such district held under and deriving its power from this Act. (1925 HR 1361; 1926 S 33.)

"Electric utility" means any corporation or municipality authorized under the laws of this Commonwealth to generate, transmit, and or distribute in public service electric current for light, heat, and power, or any of them, and any person, partnership, or association, owning or operating facilities for such generation transmission, and or distribution of the same. (1925 HR 1047; 1926 S 34.)

"Existing" means existing at the time of the enactment of this Act. (1925 HR 1044; omitted in 1926.)

"Freehold land" of a qualified district elector of an incorporated electric district means land in such district as to which such elector holds title, or record evidence of title, to a freehold estate therein.³ (1925 HR 1361, see foot note;³ 1926 S 33.)

"Future" means coming into existence after the enactment of this Act. (1925 HR 1044; omitted in 1926.)

"Giant power company" means a⁴ corporation organized under the laws of this Commonwealth for the following purposes, when, to the extent, and as authorized thereto⁵ by permit in writing from the Giant Power⁶ Board, namely:

The generation for public service of electric current by means of steam in stations of not less than three hundred thousand kilowatts capacity located in or near a coalfield;

The purchase for public service of surplus⁷ electric current from the producers or owners thereof;

The supply of electric current so generated or purchased exclusively to public service transmission lines of others;⁸

The transmission of electric current so generated or purchased from such stations, or from the point of receipt, over lines of not less than, one hundred and ten thousand volts pressure, to a point or points⁹ of connection with public service transmission lines of others;¹⁰

¹The word "business" was included in 1925 H. R. 1054.

²The words "under one business control" were omitted in 1925 H. R. 1054.

³"as to which such elector holds title, or record evidence of title, to a freehold estate therein", was substituted for "a freehold estate in which such elector holds title, or record evidence of title," in 1925 H. R. 1361.

⁴"any" was substituted for "a" in 1925 H. R. 1051 and 1926 S. 37.

⁵"thereo" was omitted in 1925 H. R. 1051.

⁶"Giant power" was omitted in 1925 H. R. 1051, 1054 and 1926 S. 37.

⁷"surplus" was omitted in 1925 H. R. 1051, 1054 and 1926 S. 37.

⁸"transmission lines of others" was substituted for "distribution system" in 1925 H. R. 1047, 1051, 1054, 1057, 1361, 1363, 1048, 1052.

⁹"or points" was omitted in H. R. 1925, 1047, 1057, 1362, 1363, 1048, 1052, and 1926 S. 34, 36.

¹⁰"or points" was omitted in 1925 H. R. 1047, 1057, 1361, 1362, 1363, 1048, 1052, and 1926 lines for carriage thence to such distribution systems" in all 1925 bills.

As incidents to such generation; The purchase and mining of coal, the recovery and sale of coke, gas, tar, ammonia, and other by-products of coal before steam raising, the manufacture and sale of chemicals, the sale of coal more suitable for by-producting or other use¹¹ elsewhere than at such generating stations, the construction, operation, and maintenance of works for the storage and cooling of water, or either of them, for steam raising or steam¹² condensation, or both. (1925 HR 1047, 1051, 1054, 1057, 1361, 1363, see foot notes; 1926 S 34, 36, 37, HR 1362, 1048, 1052.)

"Giant power permit" means a permit¹³ issued by¹⁴ the Board to a giant power company, authorizing the exercise of its corporate powers to the extent therein fixed and subjected to conditions therein imposed.¹⁵ ¹⁶ (1925 HR 1051; 1926 S 32.) (HR 1362 1054, 1048, 1052.)

"Giant power transmission line" means a transmission line of a giant power company authorized by a giant power permit. (1925 HR 1048, 1052; omitted in 1926.)

"Incorporated electric district" means a district established under this Act for the distribution to the public therein of electric current for light, heat, and power. (1925 HR 1361; 1926 S 33.)

"Interstate line" means a transmission line constructed, maintained, or operated across the boundary of this Commonwealth, or within this Commonwealth to a point of connection on such boundary with a transmission line in another state or country. (1925 HR 1044; omitted in 1926.)

"Licensed line" means an interstate line operating in pursuance of a license under Section 4 of this Act. (1925 HR 1044; omitted in 1926.)

"Major line" means a transmission line operated or suitable to be operated under a pressure of fifty thousand volts or more, or having a capacity of twenty-five thousand kilowatts or more. (1925 HR 1051, 1057; 1926 S 32, 36.) (HR 1044)

"Major transmission system" means a transmission system any transmission line in which is a major line. (1925 HR 1057; 1926 S 36.)

"Minor line" means a transmission line which is not a major line. (1925 HR 1044; omitted in 1926.)

"Mutual electric company" means a corporation organized under the laws of this Commonwealth for the distribution of electric current for light, heat, and power, or any of them to the stockholders and incidently to others. (1925 HR 1361; 1926 S 33.)

"Net investment" in a project means the actual legitimate original cost thereof, plus similar costs of additions thereto and betterments thereof, minus the sum of the following items properly allocated thereto, if and to the extent that such items have been accumulated during the period of the permit from earnings in excess of a fair return on such investment: (a) Unappropriated surplus, (b) aggregate credit balances of current depreciation accounts, and (c)

¹¹"or other use" was omitted in all 1925 bills.

¹²The word "steam" was omitted in 1925 H. R. 1047, 1361, 1363, 1362, 1048, 1052.

¹³The words "under this Act" were included in 1925 H. R. 1054 and 1926 S. 37.

¹⁴The words "issued by" were substituted for "from the" in 1925 H. R. 1362, 1052.

¹⁵The words "authorizing the exercise of its corporate powers to the extent therein fixed and subject to conditions therein imposed" were omitted in 1925 H. R. 1054 and 1926 S. 37.

¹⁶The words "to the extent therein fixed and subject to the conditions therein imposed" were substituted for "for the purposes of any of them enumerated in the foregoing definition of a Giant Power Company" in 1925 H. R. 1363, 1048,

aggregate appropriations of surplus or income held in amortization, sinking fund, or similar reserve, or expended for additions or betterments or used for the purpose for which such reserves were created. The term "cost" shall not include expenditures from funds obtained through donations by the Commonwealth, municipalities, individuals, or others.¹⁷ (1925 HR 1054; 1926 S 37.) (Compare with the following.)

The "net investment" is an electric utility on any day of computation means the actual legitimate original cost incurred on and after the first day of January, one thousand nine hundred and—, of the property, including additions and betterments of such electric utility used in its public service on the day of computation. Provided: That every electric utility shall maintain its facilities in a condition of repair adequate for the efficient operation thereof for the generation, transmission, and/or distribution of electric energy shall make all necessary renewals and replacements, and shall establish and maintain adequate depreciation reserves for such purposes.¹⁸ (1925 HR 1047; 1926 S 34.)

"Person" includes natural persons, partnerships, associations, corporations, and municipalities.¹⁹ (1925 HR 1057, 1361, 1362, 1363; 1926 S 33, 35, 36.)

"Petitioned territory" means all the land as to which a pending²⁰ petition to the Board under Section 6 of this Act prays for the creation of an incorporated electric district, or all the land as to which a pending²¹ petition to the Board prays that it be included under Section 4 of this Act in an incorporated electric district already created and existing. (1925 HR 1361; 1926 S 33.)

"Project" means the structures of a giant power company, operated, or suitable for operation, as a complete unit for the generation, receipt, and transmission of electric current the receipt and mining of coal, the recovery of by-products of coal, the manufacture and sale of chemicals, the sale of coal, the storage and cooling of water, or for any of them, to the extent and as authorized by, and subject to the conditions fixed by, its permit issued under this Act; also all water rights, rights-of-way, lands, and interests in lands, the use and occupancy of which are necessary or appropriate in the maintenance and operation of such structures. (1925 HR 1054; 1926 S 37.)

"Project works" means the physical structures of a project. (1925 HR 1054; 1926 S 37.)

"Public service" means the supply of electric current for light, heat, and power, or any of them, to the public by, first, distribution of current directly to consumers, and by, second, carriage of current²² and delivery thereof directly to, or through one or more other

¹⁷The following sentence was added to this definition in 1925 H. R. 1054 and 1926 S. 37: the board shall have the power to specify more particularly by general rules and regulations the elements of cost included in net investment."

¹⁸The words "provided: that every electric utility etc." were substituted for the following in 1925 H. R. 1047 and 1926 S. 34 "and then so maintained that its original condition of useableness, and its original expectation period of useableness, remain undiminished, the 'net investment' means such original legitimate cost, less the cost estimated by the Commission as of the day of computation of restoring such property" then so used to said standards of maintenance".

¹⁹The definition read as follows in 1925 H. R. 1057, "Person includes natural persons, corporations, partnerships, associations, municipalities, and duly authorized agencies of this and other states" (1926 S. 36.)

²⁰The word "pending" was omitted in 1925 H. R. 1361.

²¹The word "pending" was omitted in 1925 H. R. 1361.

²²The words "as a common carrier" were included in 1925 H. R. 1047

carriers to, a public service distribution system, and by, third, generation of current by means of any prime mover exclusively for delivery directly²³ to, or through one or more carriers to a public service distribution system, or any one or more of such distribution, carriage, or generation. (1925 HR 1047; 1926 S 32, 33, 34, 35, 36.)

"Public service distribution system" means a distribution system owned or operated, or both, under an obligation to supply electric current to the public. (1925 HR 1047, 1054, 1057, 1361, 1363; 1926 S 32, 33, 34, 35, 36, 37.)

"Public service generating company" means a corporation incorporated under paragraph twenty-seven, under "Corporations for Profit, Second Class," of said section two as supplemented by section one of this Act. (Not used in 1925 bills; 1926 S 32; Compare the following.)

"Public service generating company" means a corporation incorporated under the laws of this Commonwealth for the generation by any prime mover of electric current for the supply of the public with light, heat, and power by delivery of current so generated directly to, or through one or more carriers to, a public service distribution system. (1925 HR 1047; 1926 S 34.)

"Public service major line" means a major line owned or operated, or both, under an obligation to supply electric current directly²⁴ to the public or to one or more public service distribution systems.²⁵ (1925 HR 1051, 1044; 1926 S 32.)

"Public service major transmission system" means a major transmission system owned or operated, or both, under an obligation to supply electric current directly to the public or to one or more public service distribution systems. (1925 HR 1057; 1926 S 36.)

"Public service minor line" means a minor line owned or operated, or both, under obligation to supply electric current to the public. (1925 HR 1044; omitted in 1926.)

"Public service transmission company" means a corporation incorporated under paragraph twenty-eight, under "Corporations for Profit, Second Class," of said section two as supplemented by section one of this Act. (Not used in 1925 bills; 1926 S. 32.)

"Public service transmission line" means a transmission line²⁶ owned, or operated, or both, under an obligation to supply electric current directly²⁷ to the public, or to one or more public service distribution systems.²⁷ (1925 HR 1044, see foot note; 1926 S 32, 37.)

"Public service transmission system" means a transmission system owned, or operated, or both, under an obligation to supply electric current directly to the public, or to one or more²⁸ distribution systems. (1925 HR 1057; 1926 S. 36.)

"Qualified district elector" of an incorporated electric district means a person qualified to vote for township officers in any township, any part of which is included within such district, who is the holder of title to, or of record evidence of title to, a freehold estate in lands in such district. (1925 HR 1361; 1926 S 33.)

²³The word "directly" was omitted in 1925 S. 32.

²⁴The word "directly" was omitted in 1925 H. R. 1051, 1044.

²⁵The words "or to one or more public service distribution systems" were omitted in 1925 H. R. 1051, 1044.

²⁶The word "system" was substituted for "line" in 1926 S. 32.

²⁷The words "directly" and "or to one or more public service distribution systems" were omitted in 1925 H. R. 1044.

²⁸The words "public service" were included in 1925 H. R. 1057; 1926 S. 36.

"Qualified district petitioner" means a person who would be a qualified district elector if the petitioned territory were an incorporated electric district. (Not used in 1925 bills; 1926 S 33.)

"Reservation" means State forests, State parks, and any other lands and interests in lands acquired and held by the Commonwealth for any public purpose. (1925 HR 1048, 1054; 1926 S 37.)

"Retail delivery" means the delivery of electric current directly to the consumer thereof. (1925 HR 1044; omitted in 1926.)

"Retail outstate delivery" means retail delivery in another state or country of electric current transmitted thither from Pennsylvania. (1925 HR 1044; omitted in 1926.)

"Shipper" means an offerer of electric current to the operator of a major public service transmission system operating the same as a common carrier under this Act for transmission and delivery to a consignee or to a connecting carrier. (1925 HR 1057; omitted in 1926.)

"State" means any State of the United States and the District of Columbia. (1925 HR 1044; omitted in 1926.)

"Substation" means a group of electrical apparatus, on, or electrically connected with, a transmission line, for changing the voltage or frequency of electric current, or for converting direct current into alternating current, or the reverse, with or without switches and other appurtenances, all maintained and operated to facilitate the diversion or reception, or both, of current for light, heat, and power, or any of them. (1925 HR 1361, 1363; 1926 S 33, 35.)

"Transmission district" means one of a number of districts into which the State shall have been divided or redivided by the Board for securing the²⁹ carriage of electric current for light, heat, and power, or any of them, to all³⁰ public service distribution systems in each of such districts. (1925 HR 1047; 1926 S 34, 36.)

"Transmission district" means a transmission district created under Section five and six of this Act. (1926 S 36.)

"Transmission line" means a line, or a number of substantially parallel lines, of wire or cable, constituting one or more electric circuits, with appurtenant structures, all operated as, or as part of, a transportation unit under one business control, for the carriage between two or more generating stations, or from one or more generating stations to one or more substations, of electric current for light, heat, and power, or any of them. (1925 HR 1044, 1047, 1048, 1051, 1054, 1057, 1361, 1363; 1926 S 32, 33, 34, 35, 36, 37.)

"Transmission system" means one transmission line, or a network of electrically interconnected transmission lines, operated as a transportation unit under one business control. (1925 HR 1047, 1057; 1926 S 34, 36.)

"Unlicensed line" means an interstate line operating otherwise than in pursuance of a license under Section four of this Act. (1925 HR 1044; omitted in 1926.)

"Wholesale delivery" means any delivery of electric current to another which is not retail delivery. (1925 HR 1044; omitted in 1926.)

²⁹The word "common" was included in 1925 H. R. 1047.

³⁰The word "all" was omitted in 1925 H. R. 1047.

"Wholesale outstate delivery" means wholesale delivery, in another state or country, of electric current transmitted thither from Pennsylvania. (1925 HR 1044; omitted in 1926.)

NOTE: 1925 HR 1050 defines certain words and phrases which have not been included in the above standard definitions. They may be found in the bill itself.

B. SENATE BILLS, SESSION OF 1926

(With notes showing changes from the corresponding House Bills, Session of 1925.)

SENATE BILL NO. 33

Providing for the creation of incorporated electric districts (public ownership by rural communities not otherwise adequately served.)

(The wording of this bill, except where otherwise noted, is the same as 1925 HR 1361.)

Section 1. Be it enacted, &c., That this act may be cited as the Incorporated Electric Districts Act of One thousand nine hundred and twenty-six.¹

Section 2. Where used in this act singular words shall be construed as including the plural, masculine words shall be construed as including the feminine and neuter, and the following terms shall have the following meanings respectively designated for each:

"Board" (See Standard Definitions).

"Commission" (See Standard Definitions).

"Distribution system" (See Standard Definitions).

"Public Service Distribution system" (See Standard Definitions).

"Public Service"⁴ (See Standard Definitions).

"Person" (See Standard Definitions).

"Mutual electric company" (See Standard Definitions).

"Public service"⁴ (See Standard Definitions).

"Person" (See Standard Definitions).

"Mutual electric company" (See Standard Definitions).

"Incorporated electric districts" (See Standard Definitions).

"District territory" (See Standard Definitions).

"Petitioned territory" (See Standard Definitions).

"Qualified district petitioner"⁵ (See Standard Definitions).

"Freehold land" (See Standard Definitions).

"Qualified district elector" (See Standard Definitions).

"Electors' meeting" (See Standard Definitions).

Section 3. Whenever the Board shall have found as provided in this Act, as to any territory within one or more townships in any one county:

(a) That it is contiguous;

(b) That the supply of the public within it, and throughout every

¹"twenty-five" in 1925 HR 1361.

⁴Omitted in 1925 HR 1361.

⁵Omitted in 1925 HR 1361.

part of it, of electric current for light, heat, and power is technically and financially practicable and is required by the public interest;

(c) That in no part of it is the public so supplied or, in the opinion of the Board, adequately supplied otherwise than by a mutual electric company;

(d) That no part of it is within an existing incorporated electric district;

(e) The name and post office address of each of the qualified district electors thereof, and the approximate area therein of freehold lands held by each of them;

(f) That sixty per centum of the qualified district electors thereof have voted for the establishment of an incorporated electric district in a referendum election ordered and held by the Board;

The Board shall certify in writing such names, post office addresses, and areas of freehold lands, and the other facts so found, together with a name for the corporate electric district to be so established, and shall file such certificate in the office of the Secretary of the Commonwealth. Upon such filing such territory with its inhabitants shall be thereby created an incorporated electric district under this Act.

Section 4. The Board shall have power at any time to include in any incorporated electric district theretofore created additional territory contiguous to such district by such procedure as is authorized by and upon such a finding and certificate as is required by Section three hereof for the creation of an incorporated electric district.

Section 5. The Board shall have power at any time to exclude from any incorporated electric district any territory, which, after due notice and hearing, it shall have found:

(a) To have been erroneously included in such district; or

(b) That the public within it cannot be economically supplied with current by such district; or

(c) That the public within it can and will be as well or better supplied by another incorporated electric district, or by a public service company, or by a municipality.

In the event of such exclusion the Board shall certify the same to the Secretary of the Commonwealth and make provision for the apportionment, or the joint use of, and/or the compensation, if any, to be paid for, the property of such district, as may be equitable in view of the debts of such district and otherwise.

Section 6. The findings of the Board required by Section three hereof shall be made only on the petition of ten or more qualified district petitioners praying for the creation of an incorporated electric district identical with or including the district territory, and after due notice and hearing. In such hearing there shall be taken as to the petitioned territory all proper evidence upon any of the issues to be determined by the finding required by Section three hereof, offered by any person showing himself to be a qualified district petitioner; also all proper evidence upon the issues of contiguity of territory and lack of service of electric current, offered by any municipality or person claiming under the laws of this Commonwealth authority to supply to the public in any part of the petitioned territory electric current for light, heat, and power, or any of them.

Section 7. The Board may in its discretion require the pre-payment of, or a bond to secure, the whole or any part of the estimated cost to the Commonwealth, incurred elsewhere than at Harrisburg of any hearings and of any referendum election held under the provisions of Section three, four, or six of this Act.

Section 8. Every incorporated electric district so created that it includes all or any part of the transmission lines and distribution system of a mutual electric company shall, before beginning the construction of any transmission or distribution lines, purchase or appropriate and condemn all the property of such mutual electric company within such district which is used and useful in the distribution of electric current for light, heat, and power, or any of them to the public within such district plus such reasonable damages, if any, to property of such company, valuable, serviceable, and dependent for its usefulness upon the continuance of such distribution, but not taken, as may be caused by the severance therefrom of property taken.

Section 9. Every incorporated electric district shall hold an annual electors' meeting on the first Monday in March, or on such other day as may have been fixed by the by-laws. The directors of any such district may call a special electors' meeting at any time, and upon the filing of a petition by ten per centum of the qualified district electors of such district, requesting the calling of a special electors' meeting at any time and stating the specific business to be brought before it, the directors shall call a special electors' meeting as requested. Notice of all special electors' meetings shall be mailed to every qualified district elector at least ten days prior thereto, and such notice shall be accompanied by a statement of the business for which it is called. No business which has not been stated in such notice shall be done by any special electors' meeting.

Section 10. The Board shall make a list of the qualified district electors of each incorporated electric district certified by the Board to the Secretary of the Commonwealth under section three hereof, and shall by general rules and regulations or by special order provide for the amendment of such lists annually, and no person not on such list for an incorporated electric district, as last amended, shall vote at any electors' meeting of such district. The Board shall promptly supply to every incorporated electric district certified copies of such list for such district, as amended.⁶ Any ten or more qualified district electors of any incorporated electric district shall constitute a quorum of any electors' meeting of such district.

Section 11. The Board may in its discretion provide by general rules and regulations or by special order for the holding of the electors' meetings of any incorporated electric district in more than one place, and for the election of directors and the taking of any vote or votes thereat by ballot. Voting by proxy shall not be allowed in any electors' meeting.

Section 12. Any incorporated electric district may, by a majority vote of the qualified district electors thereof, present and voting at any electors' meeting, adopt for the government and management

⁶The words "for such district as amended" were substituted for "as amended for such district" in 1925 HR 1361.

of the affairs of such district a code of by-laws not inconsistent with this Act nor with any rule, regulation, or order of the Board or of the Commission hereunder. Provided: That notice of intention to adopt a code of by-laws shall have been given not less than fifteen days before such electors' meeting in such manner as the Board may by general rules and regulations or by special order prescribe.

Section 13. Incorporated electric districts shall have power to:

(a) Sue and be sued by the name of the _____
Incorporated Electric District;

(b) Take and hold real and personal property and interests therein within their limits, but only for the purposes set forth in this Act;

(c) Make such contracts as may be necessary for carrying into effect the provisions of this Act.

Section 14. The affairs of each incorporated electric district shall be managed by three directors, each of whom shall be at the time of his election or choice a qualified district elector thereof. Upon or before the filing by the Board in the office of the Secretary of the Commonwealth of the certificate as to any such district required by Section three hereof, the Board shall ascertain by referendum, election, or other proper evidence, and shall declare, the choice of a plurality of the qualified district electors for three directors of such incorporated electric district. The directors⁷ shall hold office until the next annual electors' meeting of such district thereafter and until their successors are chosen and take office. At such meeting three directors shall be elected by the qualified district electors present and voting to serve, one until the first, one until the second, and one until the third annual electors' meeting thereafter, and each until his successor is chosen and takes office. At each annual electors' meeting of such district after the first one a director⁸ shall be elected to serve until the third annual meeting next following and until his successor is elected and takes office. When a vacancy among the directors occurs otherwise⁹ than by expiration of the term for which a director was elected, the remaining directors, or, if they disagree the Board shall choose a proper person to fill the vacancy until the next annual electors' meeting, and until his successor is chosen and takes office. At such next annual electors' meeting a director shall be elected for the rest of the unexpired term by the qualified district electors.

Section 15. Unless otherwise provided by the by-laws any incorporated electric district may, by its by-laws or by a special vote at any special electors' meeting properly called, provide a fair remuneration for the time actually spent by its officers and directors in its service. No director during the term of his office shall be a party to a contract for profit with the electric district differing in any way from the business relations accorded to all qualified district electors.

Section 16. The directors of each incorporated electric district shall elect from their number annually a president and fix his compensation, if any, not inconsistent with the by-laws. They shall also appoint and fix the compensation, if any, not inconsistent with the by-laws of a secretary and a treasurer, and such other officers as they

⁷The words "as so chosen" were included in 1925 HR 1361.

⁸The words "a director" were substituted for the word "directors" in 1925 HR 1361.

⁹The word "otherwise" was substituted for the word "other" in 1925 HR 1361.

deem necessary, who need not be directors, and they may combine the offices of secretary and treasurer under the designation of secretary-treasurer. They may employ and provide for the compensation of, or provide for the employment and for the fixing of the compensation of, such employees as they deem necessary. The directors shall have general control of, and responsibility for, the conduct of the business of the incorporated electric district.

Section 17. The corporate power of every incorporated electric district shall be exercised by the directors thereof. They shall have power, subject to the rules, regulations, and orders of the Board, and to the by-laws:

(a) To construct, operate, and maintain within and without such district, when and as authorized or required by the Board, lines suitable for the distribution of electric current for light, heat, and power to the public within and throughout such district; also transmission lines, substations, transformers, and other facilities necessary or convenient for such distribution or for the procuring of such current for distribution;

(b) To appropriate and condemn, by the procedure provided in the forty-first section of the Corporation Act of April twenty-ninth,¹⁰ one thousand eight hundred and seventy-four (Pamphlet Laws seventy-three), and the amendments and supplements thereto,¹¹ any lands, rights of way, and other property and rights as to which the Board, after due notice and public hearing, shall have found that the appropriation of the same is required by the present and future interests of the Commonwealth for the construction, maintenance, or operation of such lines, substations, transformers, and other facilities, and is not incompatible with the public interests of the region in the vicinity thereof.

(c) To purchase and to distribute to the public within such district electric current for light, heat, and power, or any of them, and to charge and collect in consideration thereof just and reasonable rates which may be classified according to the kind, time, and quantity of use, and shall include a minimum charge to be paid whether current is used or not, but shall be non-discriminatory with respect to all distributees of the same class;

(d) To make, for the purpose of raising revenue by taxation,¹² a valuation, when and as the Board shall by general rules and regulations or by special order prescribe, of all property in such district upon which the county taxes of the county comprising such district are levied and assessed;

(e) To raise such revenue, if any, as may be estimated by the Board to be necessary for the purposes of such district in excess of the proceeds or estimated proceeds of rates charged and collected, as in this Section aforesaid, by the levy and assessment of taxes upon the property valued as provided in the next foregoing subsection at a rate not exceeding mills on the dollar in any one year; and to collect, as the Board shall by general rules and regulations prescribe, the taxes so levied and assessed;

¹⁰The words "April twenty-ninth" were omitted in 1925 HR 1361.

¹¹The words "(Pamphlet Laws seventy-three), and the amendments and supplements thereto," were omitted in 1925 HR 1361.

¹²The word "to" was included in 1925 HR 1361.

(f) To borrow money for the purposes of such district and issue evidences of indebtedness therefor. The total amount of indebtedness so created and remaining unpaid at any time shall not exceed two per centum of the valuation of the property within the electric district last made under subsection (d) of this section without the affirmative vote of a majority of the qualified district electors present and voting at a special electors' meeting called for that purpose. The rate of interest on any such indebtedness shall not exceed six per centum. No indebtedness shall be incurred or expenditure authorized except by vote of the directors.

Section 18. When any incorporated electric district shall borrow money and issue bonds or other evidences of indebtedness therefor, except in the case of the giving of notes for such temporary loans as may be authorized by the rules and regulations or special order of the Board, the commissioners shall sell the same to the highest bidder after public notice by advertisement once a week for three weeks in at least one newspaper of general circulation published in the county in which such incorporated electric district shall be situated. No bid for such bonds or securities at less than their par value shall be accepted.

¹³Section 19. Any corporation or natural person authorized under the laws of this Commonwealth to supply electric current to the public for light, heat, and power, or any of them, shall sell and deliver at its generating station, or at any point on any of its transmission lines, electric current to any incorporated electric district demanding the same for distribution by such district, and shall for the purpose of such delivery install at the cost of such district suitable substations, switches, transformers, and other like and unlike apparatus, as the Board in its discretion shall by general rules and regulations prescribe, or shall in specific cases order. Such delivery shall be made without discrimination as to service between such district and any other customer or public service distribution system, and at a price properly computed as not more than the average cost to the selling company, including a fair return on the proper rate base, of the generation and transmission, excluding distribution, of current supplied by it to the public. Provided: That, if experience shall at anytime have clearly shown that such sale and delivery has caused, and in the judgment of the Commission is likely to continue to cause in the near future, a decrease in the average daily output, measured in kilowatt hours per kilowatt of installed generating capacity of equipment generating the current supplied to the public for light, heat, and power by the selling company, then and in that case such price shall be equitably increased by the Commission.

Section 20. The Board shall have power:

(a) To give expert engineering, financial, and business management advice to any or all incorporated electric districts;

(b) To require of each such district the keeping of accounts and the publication of financial statements suitable for the information of the qualified district electors the distributees of electric current,

¹³Section 19 of 1925 HR 1361 omitted in 1926. It read: Section 19. Incorporated electric districts shall be served by giant power companies and common carrier transmission companies on equal terms with other public service distribution systems

Section 20 of 1925 HR 1361 is the same as section 19 of 1926 S. 33.

and the creditors of, and the persons subject to taxation by, such district; to examine all books and accounts of any such district at any time; to require any such district to submit at any time statements and reports including full information as to their finances and the conduct of their business. All such statements and reports shall be made upon oath unless otherwise specified, and in such form and on such blanks as the Board may require. Any person, who, for the purpose of deceiving, makes or causes to be made any false entry in the books or the accounts of any such district, and any person, who, for the purpose of deceiving, makes or causes to be made any false statement or report in response to a request or order or direction from the Board for the statements and reports herein referred to, shall upon conviction be fined not more than one thousand dollars, or imprisoned not more than one year or both.

(c) To hold hearings and to order testimony to be taken by deposition at any designated place in connection with any inquiry or proceeding under this Act;

(d) To require by subpoena, signed by any member of the Board, the attendance and testimony of witnesses and the production of documentary evidence from any place within the Commonwealth, and in case of disobedience to a subpoena, the Board may invoke the aid of any court of the Commonwealth in requiring the attendance and testimony of witnesses and the production of documentary evidence. Any member, expert, or examiner, of the Board, when duly designated by the Board for such purposes, may administer oaths and affirmations, examine witnesses, and receive evidence. Depositions may be taken before any person designated by the Board, or by its Secretary, and empowered to administer oaths. They shall be reduced to writing by such person or under his direction and subscribed by the deponent. Witnesses summoned before the Board shall be paid fees and mileage allowances equal to those paid witnesses in the Courts of the Commonwealth, and witnesses whose depositions are taken and persons taking the same shall be entitled to fees equal to those paid for like services in the Courts of the Commonwealth;

(e) To perform any and all such acts, to make such rules and regulations, to prescribe such forms, and to issue such orders, not inconsistent with this Act, as may be necessary and proper for the purpose of carrying out the provisions of this Act.

Section 21. The Commission shall have power to perform any and all such acts, to make such rules and regulations, to prescribe such forms, and to issue such orders, not inconsistent with this Act, as may be necessary and proper for the performance of its duty under this Act.

Section 22. Any natural person or corporation, who shall wilfully fail or who shall refuse to comply with any provisions of this Act, or with any regulation or lawful order of the Board, or of the Commission, issued or made in accordance with the provisions of, or for the proper administration of, this Act, shall be deemed guilty of a misdemeanor, and on conviction thereof, shall in the discretion of the Court be punished by a fine of not exceeding one thousand dollars in addition to other penalties herein prescribed or otherwise¹⁴ provided by law, and every month any such person or corporation shall remain in default shall be deemed a new and separate offense punishable as in this Section aforesaid.

Section 23. It is the intent of this Act to secure, so far as practicable, an abundant and cheap supply of electric current for light, heat, and power for the industries, farms, and homes of and throughout this Commonwealth which would not otherwise be supplied therewith, and this Act shall be broadly construed to that end.

Section 24. The provisions of this Act are hereby declared to be severable one from another, and severable as to the persons, corporations, and subject-matters respectively herein dealt with, and, if for any reason one or more of such provisions be judicially held to be unconstitutional as to any particular person, corporation, or subject-matter, or otherwise, such holding shall not affect the validity of such provision or provisions as applicable to other persons, corporations, or subject-matters dealt with thereby, or the validity of the remaining provisions of this Act. It is hereby declared that such provision or provisions and the remaining provisions would have been enacted notwithstanding such holding.

SENATE BILL NO. 35

Providing for the incorporation of Mutual Electric Companies (Cooperative enterprises to serve farmers in territory not otherwise adequately served).

(The wording of this bill, except where otherwise noted, is the same as 1925 HR 1363.)

Section 1. Be it enacted, etc., That Section Two of The Corporation Act of Eighteen Hundred and Seventy-four (Pamphlet Laws Seventy-three), as amended, be supplemented by adding thereto, under "Corporations for profit, second class", the following paragraph;

XXIX The distribution of electric current for light, heat, and power, or any of them, to the stockholders and incidentally to others.

Section 2. Where used in this Act singular words shall be construed as including the plural, masculine words shall be construed as including the feminine and neuter, and the following terms shall have the following meanings respectively designated for each:

"Board" (See Standard Definitions).

"Commission" (See Standard Definitions).

"Person" (See Standard Definitions).

"Substation" (See Standard Definitions).

"Transmission line" (See Standard Definitions).

"Distribution system" (See Standard Definitions).

"Public service distribution system" (See Standard Definitions)¹
(See foot note¹.)

"Public service" (See Standard Definitions).

Section 3 Corporations incorporated under Section One of this Act shall be known as mutual electric companies, and shall be in all respects subject to said Corporation Act, as amended.

¹The word "otherwise" was substituted for "herein" in 1925 HR 1361.

²The definition of "Public service" was substituted for definitions of "Giant power company" and "Common carrier transmission company" in 1925 HR 1363 (See Standard Definitions).

Section 4. Mutual electric companies shall have power, when and as authorized by permit in writing from the Board: To construct, operate, and maintain where, in such manner and subject to such conditions as the Board shall specify and set forth in the permit transmission line, distribution line, substations, transformers, and other facilities, necessary or convenient for the distribution of electric current for light, heat, and power, to the stockholders, and incidentally to others, in any territory which the Board, after due notice and hearing, shall have found to be not served or not adequately served with electric current for said uses;

To appropriate and condemn by the procedure provided in the forty-first section of said Corporation Act of one thousand eight hundred seventy-four, as amended, any lands, rights of way, and other property and rights as to which the Board, after due notice and public hearing, shall have found that the appropriation of the same is required by the present and future interests of the Commonwealth for the construction, maintenance, or operation of such lines, substations, transformers, and other facilities, and is not incompatible with the public interests of the region in the vicinity thereof;

To purchase and distribute to its stockholders and to others, as, and² to the extent hereinafter set forth electric current for light, heat, and power, or any of them, and to charge and collect in consideration thereof just and reasonable rates which may be classified according to the kind, time, and quantity of use, and shall include a minimum charge to be paid whether any current is used or not, but shall be nondiscriminatory with respect to all distributees of the same class;

As an incident to such distribution to its stockholders, to distribute electric current for said purposes in like manner to other persons. Provided: That the number of such other persons to whom distribution is made in any one calendar year shall not be so great³ as to exceed three-fourths of the number of stockholders at the beginning of such calendar year; and provided further: That the number of kilowatt hours distributed to all persons not stockholders in any calendar year after the second full year of operation shall not be so great⁴ as to exceed the number of kilowatt hours distributed to all stockholders during the preceding calendar year.

Section 5. The rates, including minimum charges, of mutual electric companies shall be such as to earn in each normal year of operation not less than fixed charges, including interest and sinking fund requirements plus⁵ operation and maintenance expenses, including taxes, plus⁵ depreciation reserve requirements, and dividends on stock outstanding at the maximum dividend rate expressed in the stock certificates. The board shall have power on petition by the holders of ten per cent of the stock outstanding, to regulate and adjust the rates, including minimum charges, of any mutual electric company, as the Board shall deem most expedient to attain these ends as near as may be.

²The word "and" was omitted in 1925 HR 1363.

³The words "shall not be so great" were substituted for "Increased so" in 1925 HR 1363.

⁴"So great" substituted for "Increased so" in 1925 HR 1363.

⁵"Plus" omitted in 1925 HR 1363.

Section 6. Each mutual electric company shall within thirty days after its incorporation, adopt for its government and management a code of by-laws not inconsistent with the said Corporation Act of one thousand eight hundred and seventy-four, as amended, nor with this Act. A majority vote of the stockholders, or their written assent evidenced in such manner as the Board shall prescribe, shall be necessary to adopt such by-laws. A copy of the by-laws shall be filed with the Board before the issuance of a permit under Section four hereof.

Section 7. All stock of any mutual electric company shall be of one class, and shall have a uniform and fixed par value of twenty-five dollars, or some multiple thereof, per share, and shall be entitled to dividends out of net earnings at a rate not to exceed eight per cent per year. The right to dividends may be cumulative from year to year, or non-cumulative. The par value, the maximum dividend rate, and the cumulative or non-cumulative character of the dividend right, shall be expressed in the certificates of stock. One-half of the par value of the capital stock subscribed for shall be paid in cash before incorporation and the certificate shall so state.

Section 8. Any mutual electric company may by its by-laws reserve to the directors the prior option to buy for the company the stock of any stockholder desiring to sell, and may reserve the right to recall at any time all or any part of the stock of any stockholder to whom it shall not have distributed during the next foregoing calendar year electric current, and likewise to recall all or any part except one share of the stock of any other stockholder. Provided: That the Company upon exercising such option to buy or right to recall shall pay for the stock bought or recalled at its book value or at its par value where the book value is less than the par value; and provided further: That no restriction upon the ownership or transfer of stock authorized by this Section shall be valid unless a provision setting out such restriction is contained in the by-laws and in the stock subscription paper, if any, and expressed in the stock certificate.

Section 9. Any natural person to whom electric current has been distributed under Section Two of this Act in any calendar year may apply in writing, in such manner as the Board may by general rules and regulations prescribe, to the mutual electric company which has made such distribution, for admission as a stockholder in such company. Such application shall be filed with the proper officer of such company, and a duplicate thereof with the Board, on or before the first day of December in such calendar year, and if so filed and accompanied by full payment for one share, the company shall issue one share to him.

Section 10. Contracts between any mutual electric company and any one or more of its stockholders, whereby the stockholder agrees to furnish labor and materials, or either of them, for the construction or maintenance of the company's works, shall, if otherwise lawful, be valid.

Section 11. Every stockholder of a mutual electric company shall have the right to one vote and no more in stockholders' meetings, without regard to the number of shares held by him. Voting by proxy shall not be allowed.

Section 12. In its by-laws every mutual electric company shall provide for one or more regular stockholders' meetings annually. The directors shall have power⁶ to call a special stockholders' meeting at any time, and upon the filing of a petition by ten per cent of the stockholders requesting the calling of a special meeting to be held at any time not less than one month after the last preceding stockholders' meeting, and stating the specific business to be brought before it, the directors shall call a meeting as requested. Notice of all stockholders' meetings shall be mailed to each stockholder at least ten days prior thereto, and in case a special stockholders' meeting is called, such notice shall be accompanied by a statement of the purposes for which it is called.

Section 13. Every mutual electric company shall fix by its by-laws the number or percentage of the stockholders necessary to constitute a quorum at stockholders' meetings.

Section 14. The affairs of every mutual electric company shall be managed by not less than three directors, all of whom shall be stockholders resident in this Commonwealth. Directors shall be elected by the stockholders at such time and for such term of office as the by-laws may prescribe. Unless otherwise provided by the by-laws, any mutual electric company may, by vote of its stockholders at any meeting regularly called, provide a fair remuneration for the time actually spent by its officers and directors in its service. No director during the term of his office shall be a party to a contract for profit with the company differing in any way from the business relations accorded to all stockholders. When a vacancy among the directors occurs, otherwise than by expiration of the term for which a director was elected, the remaining directors by majority vote shall fill the vacancy.

Section 15. The directors shall elect from their number annually a president, and if the by-laws so provide, one or more vice presidents. They shall also elect a secretary and a treasurer, who need not be directors, and they may combine the two latter offices and designate the combined office as that of secretary-treasurer.

Section 16. Any stockholder may bring charges against any director by filing them in writing with the secretary, together with a petition signed by ten per cent of the stockholders, requesting the removal of such director. The question of such removal shall be voted upon at the next stockholders' meeting, and the affirmative vote of a majority of the members present shall operate to remove the director and fill the vacancy. The director against whom such charges have been brought shall be informed thereof in writing not less than five days before the meeting, and shall have an opportunity at the meeting to be heard in person or by counsel, and the person or persons bringing the charges against him shall have the same opportunity.

Section 17. Any mutual electric company, out of earnings received during any calendar year, and remaining after the payment of fixed charges, including interest and sinking fund requirements, and of operation and maintenance expenses, including taxes, and

⁶"Power" substituted for "the right" in 1925 HR 1363.

⁷The word "after" was omitted in 1925 HR 1363.

after⁷ such payments to depreciation reserves as the Board may by general rules and regulations require, may declare and pay dividends on its stock outstanding at the end of such year. Such dividends shall be declared and paid, or set aside for payment, out of the earnings applicable thereto before any distribution of profits to stockholding consumers is authorized as provided in the next following Section.

Section 18. Out of any balance remaining from the receipts during any calendar year, after the payment or setting aside of dividends as provided in the next foregoing Section, the corporation may pay to its stockholders to whom during such calendar year it distributed electric current the whole or any part of such balance in proportion to the number of kilowatt hours so distributed to each of such stockholders, or if the by-laws so provide, in proportion to the amount of money properly charged to each of such stockholders in accordance with the rates for such distribution.

Section 19. Any debts owing from any stockholder to any mutual electric company on balance of accounts between such stockholder and such company shall be offset against any claim for dividends, or for distribution of the profits under the two next foregoing Sections, and only the balance, if any, in favor of the stockholders shall be paid to him under said Sections or either of them.

Section 20. Mutual electric companies shall not be construed to be public service companies within the public service company law.

Section 21. Any corporation or natural person authorized under the laws of this Commonwealth to supply electric current to the public for light, heat, and power, or any of them, shall sell and deliver at its generating station, or at any point on any of its transmission lines, electric current to any mutual electric company demanding the same for distribution by such mutual electric company, and shall install at the cost of such mutual electric company suitable substations, switches, transformers, and other like and unlike apparatus, as the Board in its discretion shall by general rules and regulations prescribe, or shall in specific cases order. Such delivery shall be made without discrimination as to service between such mutual electric company and any other customer or any public service distribution system, and at a price properly computed as not more than the average cost to the selling company, including a fair return on the proper rate-base of the generation and transmission, excluding distribution of current supplied by it to the public. Provided: That, if experience shall at any time have clearly shown that such sale and delivery has caused, and in the judgment of the Commission is likely to continue to cause in the near future, a decrease in the average daily output measured in kilowatt hours per kilowatt of installed generating capacity of equipment generating the current supplied to the public for light, heat, and power, by the selling company, then and in that case, such price shall be equitably increased by the Commission.

⁷Section 20 in 1925 IIR 1363 read as follows:—

“Section 20. Mutual electric companies shall be served by Giant Power Companies and common carrier transmission companies on equal terms with public service distribution systems, but shall not be construed to be public service companies, within the public service company law.”

Section 22. The Board and the Commission shall severally have power to make such rules, regulations, and order, and to prescribe such forms as may be necessary or convenient for the proper administration of this Act. The Board shall have power to give expert engineering, financial, and business management advice to any or all mutual electric companies.

Section 23. The provisions of this Act are hereby declared to be severable one from another, and severable as to the persons and subject-matters respectively herein dealt with, and if for any reason one or more of such provisions be judicially held to be unconstitutional as to any particular person or subject-matter, or otherwise such holding shall not affect the validity of such provision or provisions as are applicable to other persons or subject-matters dealt with thereby, or the validity of the remaining provisions of this Act. It is hereby declared that such provision or provisions, and the remaining provisions would have been enacted notwithstanding such holding.

SENATE BILL NO. 31

Creating a Giant Power Board with the same investigative powers that were given to the Giant Power Survey Board by the Act of May 24, 1923, P. L. 449.

(The wording of this bill, except where otherwise noted, is the same as 1925 HR 1043.)

Section 1. Be it enacted, &c., That the Secretary of Forests and Waters, a member of the Public Service Commission to be designated from time to time by the Governor, the Secretary of Agriculture, the Secretary of Labor and Industry, and a competent engineer to be designated from time to time by the Governor, are hereby created a Giant Power Board within the Department of Forests and Waters, hereinafter called the Board. The Board shall annually elect from its membership a Chairman, and a Vice Chairman to act in case of the absence or disability of the Chairman.

Section 2. It shall be the duty of the Board to continue the outline survey of the fuel resources available for Pennsylvania and of the most practicable means for their full utilization for power development and other related uses; also to recommend to the General Assembly, in outline, such policy with respect to the generation, transmission, and distribution of electric energy as will, in the opinion of the Board, best secure for the industries, railroads, farms, and homes of this Commonwealth an abundant and cheap supply of electric current for industrial, transportation, agricultural, and domestic use. The Board shall investigate the practicability of and make recommendations concerning the establishment of giant power plants for the generation of electricity by fuel power near coal mines, the transmission and distribution of electric energy so and otherwise generated throughout the Commonwealth, the saving and utilization of the by-products of coal to be consumed in such giant power and other plants, the electrification of railroads, and the co-ordination of water power and fuel power development with the regulation of rivers by storage, and otherwise, for water supply, transportation, public health, and recreation, and other beneficial uses.

Section 3. In making its investigation and reports, the Board shall make use of all available information collected by the Commonwealth and all other published or otherwise readily obtainable information within the scope of its inquiry. Every officer, department, commission, and other agency of the Commonwealth, possessing such information, shall furnish the same to the Board from time to time upon request of the Board¹ as the Governor may direct.

Section 4. It shall be the duty of the Board, in its investigation and reports, to study and consider the best practicable utilization of streams for navigation, water supply, purity of waters, river regulation and flood prevention, in relation to power, and both as to waters and as to the generation, transmission, and distribution of electric energy, to keep in view the mutual interests of this Commonwealth and other States, and to outline plans for the interchange of electrical energy with all other States within the practicable transmission distance.

Section 5. The Board shall have such other powers as may² be conferred upon it by law.

Section 6. The engineer designated as a member of the Board shall be paid such compensation as shall be fixed by the Governor of the Commonwealth. The other members of the Board shall serve without additional compensation.

Section 7. The biennial report of the Board shall be submitted to the General Assembly at the opening of each regular session.

Section 8. The Giant Power Board created by this act within the Department of Forests and Waters shall be and be deemed a departmental administrative Board within the said Department, and shall be subject in all respects to the laws of this Commonwealth limiting the powers of departmental administrative boards with regard to the expenditure of money, and prescribing the duties of the departmental administrative boards with reference to the making of financial reports, the furnishing of financial and budgetary information to the department with which it is connected, and the making of biennial reports.

³Section 9. The sum of seventy-five thousand dollars (\$75,000.00) is hereby specifically appropriated for the fiscal year beginning June first, one thousand nine hundred and twenty-six, for the purpose of the payment of the compensation of the engineer from time to time designated as a member of the Board, the compensation of necessary technical, clerical, legal, and other assistance, the rent of necessary quarters in Harrisburg and elsewhere, necessary travel of the members of the Board and its employes, their necessary subsistence when absent from their regular places of employment, the purchase through the Department of Property and Supplies of stationery, printing, and supplies and materials of every kind and description, as may be necessary for the proper conduct of the work of the Board, and all other necessary expenses incurred in the performance of the duties imposed under this Act.

¹This read as follows in 1925 HR 1043: "When as the Governor may direct from time to time on request of the Board."

²"Hereafter" was included in 1925 HR 1043.

³Changed from Section 9 of 1925 HR 1043 which read:—

"The sum of one hundred and fifty thousand dollars (\$150,000.00) is hereby specifically appropriated for the two fiscal years beginning June first, one thousand nine hundred and twenty-five, for the purpose—" continued as above.

SENATE BILL NO. 32

Authorizing the incorporation of Giant Power Companies, public service generating companies, and public service transmission companies.

(The wording of section one and two of this bill, except where otherwise noted, is the same as 1925 HR 1056. Sections three, four, and five follow the wording, except where otherwise noted, of 1925 HR 1051, sections three, four, and five.)

Section 1. Be it enacted, &c., That section two of the Corporation,¹ Act approved the twenty-ninth day of April one thousand eight hundred and seventy-four (Pamphlet Laws seventy-three),² as amended, be supplemented by adding thereto, under "Corporations For Profit, Second Class", the following paragraphs;

XXVI. The following purposes, when, to the extent, and as authorized thereto, by permit in writing from the Giant Power Board, namely:

The generation for public service of electric current by means of steam in stations of not less than three hundred thousand kilowatts capacity located in or near a coalfield;

The purchase for public service of surplus electric current from the producers or owners thereof;

The supply of electric current so generated or purchased exclusively to the public service transmission lines of others;³

The transmission of electric current so generated or purchased from such stations, or from the point of receipt over lines of not less than one hundred and ten thousand volts pressure to a point or points of connection with the public service transmission lines of others;⁴

As incidents to such generation: The purchase and mining of coal; the recovery and sale of coke, gas, tar, ammonia, and other by-products of coal before steam raising; the manufacture and sale of chemicals; the sale of coal more suitable for by-producting,⁵ elsewhere than at such generating stations; the construction, operation, and maintenance of works for the storage and cooling of water, or either of them, for steam raising or steam condensation, or both. Provided: That permit be first secured as required by law from the Water and Power Resources Board for any dam or other obstruction in, along, across, or projecting into any stream or body of water wholly or partly within, or forming the boundary of, this Commonwealth, and for any change in the course, current, or cross section of any such stream or body of water.

XXVII.⁶ The generation, by any prime mover, of electric current for the supply of the public with light, heat, and power, or any of them, by delivery of the current so generated directly to, or through one or more carriers to, a public service distribution system.

¹"Corporation" was substituted for "an" in 1925 H. R. 1056.

²"Entitled an act to provide for the incorporation and regulation of certain corporations" was included in 1925 H. R. 1056.

³"transmission lines of others;" was substituted for "distribution systems" in 1925 H. R. 1056.

⁴"the public service transmission lines of others;" was substituted for "other transmission lines for carriage thence to such distribution systems;" in 1925 H. R. 1056.

⁵"or other use;" was omitted in 1925 H. R. 1056.

⁶Everything in this bill including and following paragraph XXVII was substituted for the following in 1925 H. R. 1056: "XXVII The common carriage from all shippers to public service distribution systems of electric current for light, heat, and power, or any of them."

XXVIII.⁷ The transmission of electric current for the supply of the public by delivery of the current so transmitted directly to, or through one or more other carriers to, a public service distribution system.

Section 2. Where used in this act singular words shall be construed as including the plural, masculine words shall be construed as including the feminine and neuter, and the following terms shall have the following meanings respectively designated for each:

"Board" see standard definitions.

"Giant power company" means a corporation incorporated under paragraph twenty-six, under "Corporations for Profit Second Class", of section two of said Corporation Act as supplemented by section one of this Act.⁸

"Public service generating company" (See Standard Definitions).

"Public service transmission company" (See Standard Definitions).

"Giant power permit" (See Standard Definitions).

"Public service"⁹ (See Standard Definitions).

"Transmission line" (See Standard Definitions).

"Public service transmission line"¹⁰ (See Standard Definitions).

"Major line" (See Standard Definitions).

"Public service major line" (See Standard Definitions).

"Distribution system" (See Standard Definitions).

"Public service distribution system" (See Standard Definitions).

¹¹Section 3. Any giant power company holding a giant power permit, and any public service transmission company,¹² shall have the right and power to condemn and appropriate any lands and other property and rights as to which the Giant Power Board, after due notice and public hearing, shall have found that the appropriation of the same is required by the present and future interests of the Commonwealth for the construction, maintenance, or operation of the works of such giant power company, or of any transmission line of such public service transmission company,¹³ and is not incompatible with the public interests of the region in the vicinity of such works or in the vicinity of such transmission line of such public service transmission company.¹⁴

Section 4. All damages arising from the exercise of the right and power of condemnation conferred by section three of this Act shall

Section 2. All acts or parts of acts inconsistent with this Act are hereby repealed."

⁷This is the same as the underlined words in section eight of 1925 H. R. 1047, which section was omitted in the 1926 draft (1926 S. 34) also omitted in 1925 H. R. 1051.

⁸Compare with Standard Definition of Giant Power Company.

⁹"Public service" not defined in 1925 H. R. 1051 or 1056.

¹⁰"Public service transmission line" not defined in 1925 H. R. 1051 or 1056.

¹¹Sections 3, 4 and 5 of this Act follow the wording of sections 3, 4, and 5 of 1925 H. R. 1051, with the exceptions noted in foot notes 11 to 17.

Sections 1 and 2 of 1925 H. R. 1051 read as follows:

"Section 1. Be it enacted, &c., That this Act may be cited as The Electric Power Condemnation Act, one thousand nine hundred and twenty-five.

Section 2. Where used in this act single words shall be construed as including the plural, masculine words shall be construed as including the feminine and neuter, and the following terms shall have the following meanings respectively designated for each:"

"Board" (see Standard Definitions)

"Giant Power Company" (see Standard Definitions)

"Giant Power Permit" (see Standard Definitions)

"Transmission Line" (see Standard Definitions)

"Major Line" (see Standard Definitions)

"Public Service Major Line" (see Standard Definitions)

¹²"and any public service transmission company" omitted in 1925 H. R. 1051.

¹³The words "giant power company or of any transmission line of such public service transmission company" were substituted for the word "company" in 1925 H. R. 1051.

¹⁴The words "or in the vicinity of such transmission line of such public service transmission company" were omitted in 1925 H. R. 1051.

be ascertained, recovered, and paid, as provided by the forty-first section of said Corporation¹⁵ Act¹⁶ and the amendments and supplements thereto.

Section 5. No lands or other property or rights shall be condemned or appropriated for occupancy and use by any public service major line not a part of the works of a giant power company, nor a transmission line of a public service transmission company,¹⁷ otherwise than under the Act approved June fourteenth one thousand nine hundred and twenty-three (Pamphlet Laws seven hundred,¹⁸) unless and until the Giant Power Board, after due notice and hearing, shall have found that the appropriation of the same is required by the present and future interests of the Commonwealth for the construction, maintenance, or operation of such major¹⁹ line and is not incompatible with the public interests of the region in the vicinity of such line.

SENATE BILL NO. 37

Authorizing the issuance of giant power permits.

(The wording of this bill, except where otherwise noted, is the same as 1925 HR 1054.)

Section 1. Be it enacted, &c., That this Act may be cited as the Giant Power Permit Act one thousand nine hundred and twenty-six.¹

Section 2. Where used in this Act singular words shall be construed as including the plural, masculine words shall be construed as including the feminine and neuter, and the following words shall have the following meanings respectively designated for each:

"Board" (See Standard Definitions).

"Commission" (See Standard Definitions).

"Giant power company" (See Standard Definitions).

"Giant power permit" (See Standard Definitions).

"Transmission line" (See Standard Definitions).

"Public service transmission line"² (See Standard Definitions).

"Distribution system" (See Standard Definitions).

"Public service distribution system" (See Standard Definitions).

"Reservation" (See Standard Definitions).

"Project" (See Standard Definitions).

"Project works" (See Standard Definitions).

"Net Investment"³ (See Standard Definitions).

Section 3. Any giant power company may exercise its corporate powers for all or any of⁴ the purposes enumerated in the definition of giant power company, in Section two of this Act,⁵ when to the extent, and as authorized thereto, by, and subject to the conditions imposed by a permit in writing issued by the Board under this Act. Any exercise or attempted exercise otherwise of its corporate powers shall be unlawful.

¹⁵The words "said corporation" were omitted in 1925 H. R. 1051.

¹⁶Approved April 29, 1874 pamphlet law 73," included in 1925 H. R. 1051.

¹⁷The words "nor a transmission line of a public service transmission company," were omitted in 1925 H. R. 1051.

¹⁸The words "and the amendments and supplements thereto" were included in 1925 H. R. 1051.

¹⁹The word "major" was substituted for "transmission" in 1925 H. R. 1051.

¹"Twenty-six" substituted for "twenty five" in 1925 HR 1054.

²This definition omitted in 1925 H. R. 1054.

³The following sentence was added to this definition in 1925 HR 1054: "The board shall have power to specify more particularly by general rules and regulations the elements of cost included in net investment."

⁴The words "all or any of" were omitted in 1925 H. R. 1054.

⁵The words "or for any of said enumerated purposes" were included in 1925 HR 1054.

Section 4. The Board is hereby authorized and empowered:

(a) To ascertain the net investment as defined in Section two of this Act, of any permittee under this Act. For this purpose the permittee shall, upon oath, within a reasonable period of time to be fixed by the Board after the construction of the original project works, or any addition thereto, or betterment hereof, file with the Board, in such detail as the Board may require, a statement in triplicate showing the actual legitimate cost of the construction of such project works, addition, or betterment, and the price paid for water rights, rights-of-way, lands, or interest in lands. The Board shall deposit one of said triplicate statements with the Commission. The permittee shall grant to the Board and to the Commission, or to the duly authorized agent or agent of the Board and of the Commission, at all reasonable times free access to the project and project works and to all maps, profiles, contracts, reports of engineers, accounts, books, records, and all other papers and documents relating thereto;

(b) To issue permits to giant power companies for the exercise of their corporate powers for the purposes enumerated in the definition of giant power companies in Section two of this Act, or for any of the purpose there enumerated, and in that behalf, for the construction or acquisition, and the maintenance and operation of generating stations of not less than three hundred thousand kilowatts capacity, transmission lines suitable for operation under a pressure of not less than one hundred and ten thousand volts, also water storage, and cooling works, or either of them, except dams or other water obstructions and changes in the course, current, or cross section of any stream or body of water for which a permit from the Water and Power Resources Board is required by law; also works for the recovery and treatment of any or all by-products of coal before steam raising, also works for the manufacture of chemicals, also works for the mining and preparation of coal, also any other project works necessary or convenient for such enumerated purposes, to the extent and as the same are authorized by, and subject to the conditions imposed by such permit. Provided: That permits shall be issued within any reservation only after a finding by the Board in each case that the permit will not interfere or be inconsistent with the purpose for which such reservation was created or acquired, and shall be subject to and contain such conditions as the head of the Department under whose supervision such reservation falls shall deem necessary for the adequate protection and utilization thereof;

(c) Upon the filing of any application for a permit under this Act, the Board before granting such application, shall publish notice thereof for three weeks in a daily or weekly newspaper of general circulation in the county or counties in which the project is to be situated. Such notice shall set forth briefly the character of the project and the intention to make application for a permit therefor;

(d) To hold hearings, and to order testimony to be taken by deposition at any designated place in connection with the application for any permit, and to require by subpoena, signed by any member of the Board, the attendance and testimony of witnesses and the production of documentary evidence from any place within the Commonwealth, and in case of disobedience to a subpoena, the Board may invoke the aid of any court of the Commonwealth, in requiring

the attendance and testimony of witnesses and the production of documentary evidence. Any member, expert, or examiner of the Board may, when duly designated by the Board for such purposes, administer oaths and affirmations, examine witnesses, and receive evidence. Depositions may be taken before any person designated by the Board, or by its secretary, and empowered to administer oaths. They shall be reduced to writing by such person, or under his direction, and subscribed by the deponent. Witnesses summoned before the Board shall be paid fees and mileage allowances equal to those paid witnesses in the courts of the Commonwealth, and witnesses whose depositions are taken, and persons taking the same shall be entitled to fees equal to those paid for like services in the courts of the Commonwealth;

(e) To perform any and all such acts, to make such rules and regulations, to prescribe such forms, and to issue such orders, not inconsistent with this Act, as may be necessary and proper for the purpose of carrying out the provisions of this Act.

Section 5. The Commission shall have power to prescribe rules and regulations for the establishment of a system of accounts, and for the maintenance thereof by permittees hereunder to examine all books and accounts of such permittees at any time, to require them to submit at such time or times as the Commission may require, statements and reports, including full information as to assets and liabilities, capitalization, net investment, and reduction thereof, gross receipts, interest due and paid, depreciation and other reserves, cost of project, cost of maintenance and operation of the project, cost of renewals and replacements of the project, works, and as to depreciation of the project works, and as to production, transmission, use, and sale of power, by-products of coal, and chemicals; also to require any licensee to make adequate provisions for currently determining said cost and other facts. All such statements and reports shall be made upon oath, unless otherwise specified, and in such form and on such blanks as the Commission may require. Any person, who, for the purpose of deceiving, makes or causes to be made any false entry in the books or for the accounts of such permittee, and any person, who, for the purpose of deceiving, makes or causes to be made any false statement or report in response to a request, or order, or direction from the Commission for such statements and reports, shall upon conviction be fined not more than two thousand dollars, or imprisoned not more than five years, or both.

Section 6. Permits under this Act shall be limited to such⁶ periods, not exceeding fifty years, as the Board shall determine and set forth therein. Every such permit shall be conditioned upon acceptance by the permittee of all the terms and conditions of this Act, and such further conditions, if any, as the Board shall prescribe in conformity with this Act, which said terms and conditions, and the acceptance thereof shall be expressed in each permit. Permits may be revoked only for the reasons, and in the manner, prescribed under the provisions of this Act, and may be altered or surrendered only upon mutual agreements between the permittee and the Board after ninety days public notice.

⁶The word "such" was omitted in 1925 HR 1054.

Section 7. No voluntary transfer of any permit, or of the rights and powers granted thereunder, shall be made without the written approval of the Board, and any successor or assign of the rights of the permittee, whether by voluntary transfer, judicial sale, foreclosure, sale, or otherwise, shall be subject to all the conditions of the permit under which such rights and powers are held by the permittee, and also subject to all the terms and conditions of this Act to the same extent as though the successor or assign were the original licensee hereunder. Provided: That a mortgage, or trust deed, or a judicial sale made thereunder, or a tax sale⁷, shall not be deemed voluntary transfers within the meaning of this Section.

Section 8. Every application for a permit under this Act shall be in writing and shall be accompanied by:

(a) Such maps, plans, specifications, estimates of cost, and statement of the plan of operation, as the Board may deem necessary for a full understanding of the subject. Such maps, plans, and specifications, when approved by the Board, shall be made a part of the permit, and thereafter no change shall be made in such maps, plans, or specifications, until such change shall have been approved and made a part of such permit by the Board;

(b) A copy of the applicant's charter of incorporation;

(c) Such additional information as the Board may require.

Section 9. All permits issued under this Act shall be on the following conditions:

(a) That the project adopted, including the maps, plans, and specifications, shall be such as in the judgment of the Board will be best adapted to a comprehensive scheme of utilization of coal through generation of current by steam, and as an incident thereto, if, and to the extent that the Board shall in the permit so require the recovery, development, treatment, and manufacture of by-products of coal, and, if necessary in order to secure such scheme, the Board may require the modification of the project and of the maps, plans and specifications of such project before approval;

(b) That, except when emergency shall require for the protection of life, health, or property, no substantial alteration or addition not in conformity with the approved plans shall be made of, or⁸ to any substantial part of the project works without the prior approval of the Board; and any substantial alteration or addition made, when so required by emergency, shall thereafter be subject to such modification and change as the Board may direct;

(c) That, the permittee⁹ shall maintain the project works in a condition of repair adequate for the purpose for which the permit is issued, shall make all necessary renewals and replacements, shall establish and maintain adequate depreciation reserves for such purposes, and shall conform to such rules and regulations as the Board may from time to time prescribe for the protection of life, health, and property;

(d) That¹⁰ upon not less than two years notice in writing from the Board, the Commonwealth shall have the right, upon or after the expiration of any permit, to take over and thereafter to main-

⁷The words "a tax sale" were substituted for "under tax sales" in 1925 HR 1054.

⁸The words "of or" were omitted in 1925 HR 1054.

⁹"Permittee" substituted for "license" in 1925 HR 1054.

¹⁰The word "that" was omitted in 1925 HR 1054.

tain and operate any project covered in whole or in part by the permit, upon the condition that before taking possession it shall pay the the net investment in the project¹¹ and shall assume all contracts entered into by the permittee with the approval of the Commission. The net investment of the permittee in the project so taken shall be determined by agreement between the Commission and the permittee, but if they cannot agree, by proceedings in equity instituted by the Commonwealth in any court clothed with jurisdiction in civil cases to which the Commonwealth is a party. Provided: That such net investment shall not include or be affected by, the value of any lauds, rights-of-way, or other property whatsoever of the Commonwealth, occupied or used under the permit, by the permit itself, or by good will, going value, or prospective revenues. Provided further: That the values allowed for water-rights, rights-of-way, lands or interests in lands, shall not be in excess of the actual legitimate cost thereof, at the time of acquisition by the permittee,¹² and provided further: That the right of the Commonwealth at any time, by condemnation proceedings and upon payment of just compensation, to take over, maintain, and operate any project licensed under this Act is hereby expressly reserved;¹³

(e) That,¹⁴ if the Commonwealth does not at the expiration of the original permit exercise its right to take over, maintain, and operate the project as provided in the next preceding subsection, the Board is authorized to issue a new permit to the original permittee upon such terms and conditions as may be authorized or required under the then existing laws and regulations, or to issue a new permit under said terms and conditions to a new permittee, which permit may cover any project covered by the original permit, and shall be issued on the condition that the new permittee shall before taking possession of such project, pay such amount and assume such contracts as the Commonwealth is required to do in the manner specified in the last preceding subsection. Provided: That if the Commonwealth does not exercise the right to take over, or does not issue a permit to a new permittee, or does not issue a new permit to the original permittee, then the Board shall issue from year to year an annual permit to the then permittee under the terms and conditions of the original permit until the plant is taken over or a new permit is issued as aforesaid;

(f) That, in respect to the sale and delivery of electric current by the permittee, rates, service, and facilities shall be reasonable, non-discriminatory, and just, and all unreasonable, discriminatory, and unjust rates, service, and facilities are hereby prohibited. Such rates shall be so regulated as to afford the permittee a reasonable opportunity for a fair return from its entire business, including business other than the sale and delivery of electric current, in view of all circumstances at the time of regulation, upon the net investment as defined in Section two of this Act, and without regard to any valuation of all or any property of the permittee which may differ from such net investment;

¹¹"Upon the condition that before taking possession it shall pay the net investment in the project" was omitted in 1925 HR 1054.

¹²The word "permittee" was substituted for "License" in 1925 HR 1054.

¹³The balance of this paragraph read as follows in 1925 HR 1054:—"to take over maintain, and operate any project licensed under this Act at any time by condemnation proceedings upon payment of just compensation is hereby expressly reserved."

¹⁴The word "that" was omitted in 1925 HR 1054.

(g) That the permittee assumes, and will faithfully discharge, the duty of a common purchaser, obligated as such to purchase at a standard maximum price not exceeding the capital operating and maintenance cost of generation in the station of the permittee from every public service or other producer of electric current, all current of standard voltage, frequency, and form, which may be the form of either alternating or direct current, generated by them in this Commonwealth, and delivered at the cost of the seller to the generating station, or to any transmission line of the permittee. The standard maximum price shall be fixed as to each permittee from time to time by the Commission, and the standards of voltage, frequency, and form shall be fixed as to each permittee from time to time by the Board. As such common purchaser the permittee shall receive and purchase all such current, so offered, to the extent of its capacity to transmit and ability to resell the same without discrimination in facilities, service, or price, in favor of one seller as against another, and shall install at the cost of the seller suitable switches, transformers, and other like and unlike apparatus, as the Board may in its discretion order. But if, and to the extent that it shall lack capacity to transmit, or be unable to resell, all current, as aforesaid, which could be generated in this Commonwealth and is offered, it shall to the extent of its capacity and ability receive and purchase all current generated by water power, and as to current produced by fuel power, shall receive and purchase from each producer so offering a part of that so offered ratably in proportion to installed generating capacity of each producer, as determined by the Board, or lacking such determination, as reasonably estimated by the permittee. And if the permittee shall be unable to so receive and purchase all such current generated by water power, the quantity to be received and purchased from each producer, thereof, shall be computed and determined ratably in like manner. Provided: That common purchaser duty under this subsection shall not be construed to require the permittee, as to steam-generated current, to reduce its own production, nor, as to water-power generated current, to increase its own unit cost of production, whether by reduction of output, or otherwise. Provided further: That the Commission shall have power to require enlargement of the permittee's capacity to receive and transmit current as may be reasonably necessary;

(h) That with respect to electric current, to anything produced by the permittee, and to electrical apparatus, the permittee will not enter into any combination, agreement, arrangement, or understanding, express or implied, to limit output, to restrain trade, or to fix, maintain, or increase prices;

(i) Such other conditions not inconsistent with this Act as the Board may require.

Section 10. The permittee¹⁵ shall commence the construction of the project works within the time fixed in the permit, and shall thereafter in good faith and with due diligence proceed with the construction, and shall within the time fixed in the permit complete the project works and put the project into operation. The periods for the commencement of construction may be extended once, but no longer than two additional years, and the period for the

¹⁵"Permittee" substituted for "licensee" in 1925 HR 1054.

completion of construction may be extended by the Board, incompatible with the public interest, if the permittee shall not commence actual construction within the time prescribed in the permit, or as extended by the Board, then after due notice shall have been given, the permit may be terminated upon written order of the Board. If the construction shall have been begun but not completed within the time prescribed in the permit, or as extended by the Board, then the Attorney General upon the request of the Board, shall institute proceedings in equity in any court clothed with jurisdiction in civil cases to which the Commonwealth is a party for the revocation of the permit, the sale of that part of the plant already constructed, and such other equitable relief as the case may demand, as provided for in Section thirteen of this Act.

Section 11. That, whenever the public interest requires or justifies the execution by the permittee of contracts for the sale and delivery of current for periods extending beyond the date of termination of the permit, such contracts may be entered into upon the joint approval of the Board and of the Commission, and thereafter, in the event of failure to issue a new permit to the original permittee at the termination of the original permit, the Commonwealth or the new permittee, as the case may be, shall assume and fulfill all such contracts.

Section 12. That any permittee or any person, who shall willfully fail or who shall refuse to comply with any of the provisions of this Act, or with any of the conditions made a part of any permit issued hereunder; or with any subpoena of the Board hereunder, or of the Commission, with respect to the administration hereof, or with any regulation or lawful order of the Board, or of the Commission, issued or made in accordance with the provisions of, or for the proper administration of, this Act, shall be deemed guilty of a misdemeanor and on conviction thereof shall in the discretion of the Court be punished by a fine of not exceeding one thousand dollars in addition to other penalties herein prescribed or otherwise¹⁶ provided by law, and every month any such permittee or any such person who shall remain in default after written notice from the Board or from the Commission shall be deemed a new and separate offense punishable as aforesaid.

Section 13. The Attorney General may, on the request of the Board, institute proceedings in any court now or hereafter clothed with jurisdiction in civil cases in which the Commonwealth is a party, for the purpose of remedying or correcting by injunction, mandamus, or other process, any action or mission in violation of the provisions of this Act, or of the terms, conditions, or stipulations of any permit granted hereunder, or of any lawful regulation or order promulgated hereunder. If any permittee shall fail to comply with the requirements of any final decree in any such proceedings, the Attorney General may institute proceedings for the purpose of revoking the permit. Such court shall have jurisdiction over all the above-mentioned proceedings, and shall have power to issue and execute all necessary process, and to make and enforce all rights, orders, and decrees, to compel compliance with the lawful orders and regulations of the Board, or of the Commission, and to compel the performance of any condition lawfully imposed

¹⁶The word "otherwise" was omitted in 1925 HR 1054.

under the provisions of this Act. If a decree revoking a permit is entered, the court is hereby empowered to sell the whole or any part of the project, to wind up the business of the permittee conducted under the permit, to distribute the proceeds to the parties entitled to the same, and to make and enforce such further orders and decrees as equity and justice may require. At such sale or sales the vendee shall take the rights and privileges belonging to the permittee and shall perform the duties of the permittee and assume all outstanding obligations and liabilities of the permittee which the court may deem equitable in the premises.

Section 14. The right to amend and repeal this Act is hereby expressly reserved, but no such alteration, amendment, or repeal shall affect any permit theretofore issued under the provisions of this Act, or the right or powers of any permittee thereunder.

Section 15. The several provisions of this Act are hereby declared to be severable, and if any provisions of this Act shall be held by any court to be unconstitutional, it is the legislative intent that such judgment shall not affect any other provision thereof.

Section 16. All acts or parts of acts inconsistent with this Act are hereby repealed.

For the pooling of electric service by imposing the duty of common purchase and common sale in transmission districts on the operators of major transmission systems, therein.

The wording of this bill, except where otherwise noted, is the same as 1925 HR 1057, which imposed the duty of common carriage and provided for the division of electric service into generating companies, transmission companies, and distribution companies.

Section 1. Be it enacted, &c., That this Act may be cited as The Electric Service Pooling Act one thousand nine hundred twenty-six.¹

Section 2. Where used in this Act singular words shall be construed as including the plural, masculine words shall be construed as including the feminine and neuter, and the following terms shall have the following meanings respectively designated for each:

"Board" (See Standardization Definitions).

"Commission" (See Standard Definitions).

"Transmission line" (See Standard Definitions).

"Major line" (See Standard Definitions).

"Transmission system" (See Standard Definitions).

"Public service"² (See Standard Definitions).

"Public service transmission system" (See Standard Definitions).

"Major transmission system" (See Standard Definitions).

"Public service major transmission system" (See Standard Definitions).

"Transmission district"³ (See Standard Definitions).

"Distribution system" (See Standard Definitions).

"Public service distribution system" (See Standard Definitions)
(See foot note.⁴)

¹The words, "Electric Service Pooling Act one thousand nine hundred twenty-six" were substituted for "Electricity Common Carrier Act one thousand nine hundred twenty-five" in 1925 HR 1057.

²Standard definition of "Public service" omitted in 1925 HR 1057.

³Standard definition of "Transmission district" omitted in 1925 HR 1057.

⁴Standard definition of "Common carrier transmission company" was inserted here in 1925 HR 1057 (See Standard Definitions).

"Giant power company" (See Standard Definitions).

"Person" (See Standard Definitions).

(See foot note⁵.)

Section 3. Every person operating on or after January first, nineteen hundred and ———, a public service major transmission system within or partly within Pennsylvania⁷ is hereby charged with, and shall faithfully discharge the duties of, a common purchaser and common seller as this section hereafter specifies:

(a) Every such person shall be obligated to purchase, at a standard maximum price not exceeding the capital, operation, and maintenance cost of generation in the lowest cost generating station, if any, of such common purchaser, from every public service or other producer, current of standard voltage, frequency, and form, which may be the form of either alternating or direct current, generated by such producers within the same transmission district, offered for sale by, and delivered at the cost of, the seller to any transmission line of such common purchaser therein. The standard maximum price shall be fixed as to each such common purchaser from time to time by the Commission, and the standards of voltage, frequency, and form shall be fixed as to each such common purchaser from time to time by the Board. Such common purchaser shall receive and purchase all such current so offered to the extent of his capacity to transmit and ability to distribute or resell the same within such transmission district without discrimination in facilities, service, or price, in favor of one seller as against another, and shall install at the cost of the seller suitable switches, transformers, and other like and unlike apparatus, as the Board shall in its discretion order. But if, and to the extent that, he shall lack capacity to transmit, or be unable to resell, all current, as aforesaid, which could be generated in such transmission district and is offered, he shall, to the extent of his capacity and ability, receive and purchase all current generated by water power, and as to current produced by fuel power, shall receive and purchase from each producer so offering a part of that so offered, ratably in proportion to the installed generating capacity of each producer as determined by the Board, or lacking such determination, as reasonably estimated by such common purchaser, and if such purchaser shall be unable to so receive and pur-

⁵Definitions of "Shippers", "Consignee" and "Connecting Carrier" were inserted here in 1925 HR 1057 (See Standard Definitions).

⁶This blank space was substituted for "twenty-six" in 1925 HR 1057.

⁷The remaining portion of this section (3) read as follows in 1925 HR 1057: "Shall operate the same, or the portion thereof within Pennsylvania exclusively as a common carrier of electric current for light, heat, and power, or any of them, from any any shipper to any consignee or connecting carrier. Such operator shall faithfully perform the duty of a common carrier of current as aforesaid, obligated as such to receive from all shippers, to transmit and to deliver to all consignees or connecting carriers, current of standard voltage, frequency, and form, which may be the form of either alternating or direct current, offered for such transmission and delivery. The standards of voltage, frequency, and form, shall be fixed as to each transmission system, or part thereof, from time to time by the Board, or lacking such fixing by the Board, the same shall be fixed reasonably by such common carrier. Every such common carrier shall receive, transmit, and deliver as aforesaid all such current so offered to the extent of his capacity to receive, transmit, and deliver the same, without discrimination in facilities, service, or rates in favor of one shipper, consignee, or connecting carrier as against another, and shall install at the cost of the shipper and consignee, respectively, suitable switches, transformers, and other like and unlike apparatus, as the Commission in its discretion shall by general rules and regulations prescribe, or shall in specific cases order. But if and to the extent that such common carrier shall lack capacity to so receive, transmit, and deliver all current so offered, he shall to the extent of his capacity so receive, transmit, and deliver all current so offered by giant power companies, and all current so offered distinguishable as generated by water power, without discrimination between said two kinds of current, and as to other current so offered shall so receive from each shipper, and shall so transmit and deliver, an equal part of the current offered; and if such common carrier shall lack capacity to so receive, transmit, and deliver current so offered by giant power companies and current so offered distinguishable as generated by water power, he shall in like manner, without discrimination between said two kinds of current, so receive from each shipper, and shall so transmit and deliver an equal part of the current offered.

chase all such current generated by water power, the quantity thereof to be so received and purchased from each producer shall be computed and determined ratably in like manner. Provided: That common purchaser duty under this Section shall not be constructed to require such common purchases, as to fuel power generated current purchased, to reduce his own production, nor, as to power generated current purchased, to increase his own unit of production, whether by reduction of output or otherwise. Provided further: That the Commission shall have power to require enlargement of such common purchaser's capacity to receive and transmit current as may be reasonably necessary;

(b) Every person operating on said date a public service major transmission system within Pennsylvania shall be obligated as a common seller to sell and deliver at any of his generating stations, or at any point on any of his transmission lines, current to all public service distribution systems within the same transmission district demanding it for distribution by such distribution systems severally, and shall install at the several cost of such distribution systems suitable substations, switches, transformers, and other like and unlike apparatus, as the Board in its discretion shall by general rules and regulations prescribe, or shall in specific cases order. Such delivery shall be made without discrimination as to service among such purchasing distribution systems, and without discrimination between such purchasing distribution systems, and the distribution systems if any, owned or operated by such common seller. Such sales shall be at a price properly computed as not more than the average cost to the common seller, including a fair return on the proper rate-base, of the purchase, generation, and transmission, excluding distribution, of the current transmitted by it. Provided: That if experience shall at any time have clearly shown that such sale and delivery to any such distribution system has caused, and in the judgment of the Commission is likely to continue to cause in the near future, a decrease in the average daily output, measured in kilowatt hours per kilowatt of installed generating capacity of equipment generating the current transmitted by such common seller, then and in that case such price shall be equitably increased by the Commission.

Section 4. The facilities of common purchasers and common sellers⁸ under this Act shall be adequate for the performance of their common purchase and common sale⁹ duty. The services rendered by them in common purchase and common sale hereunder, and the rates charged therefor, shall be reasonable nondiscriminatory and just. All inadequacy of facilities, and all unreasonable discriminatory or unjust services and rates, are hereby prohibited. The Commission shall have power, on its own motion, or upon application of any producer of current, or operator of any public service distribution system within the same transmission district,¹⁰ to regulate the construction, operation, and maintenance of the facilities of common purchasers and common sellers hereunder, the services rendered by them hereunder, and the rates charged therefor, also after due notice and hearing, in specific cases to order the better-

⁸"Common purchasers and common sellers" substituted for "carriers" in 1925 HR 1057.

⁹"Common purchase and common sale" substituted for "Common carriers" in 1925 HR 1057.

¹⁰"Producer of current or operator of any public service distribution system within the same transmission districts" substituted for "Shipper, consignee, connecting carrier, interested municipality, or other interested person" in 1925 HR 1057.

ment, enlargement, and extension, or any of them, of such facilities, and the rendering of such services and to fix such rates.

¹¹Section 5. The Board shall have power, and it shall be its duty, from time to time to divide and redivide the State into transmission districts, as the Board shall deem most expedient for securing the common purchase and common sale under this Act of electric current for light, heat, and power, or any of them.¹²

Section 6. In making such division and redivision the Board, having in view the major public service transmission systems then existing and then reasonably anticipated by the Board, shall assign to each then existing or so anticipated major public service transmission system, or to a part thereof, such a district as in the judgment of the Board can then or in the near future be best served by such system as a common purchaser and common seller under this Act. The division and redivision shall be so made that every part of the Commonwealth is in one such district and no more.

Section 7. The Board shall have power reasonably to require and permit the extension in any transmission district of the lines and other facilities of the major public service transmission system to which such district is assigned, as the Board may deem necessary and convenient for the common purchase and common sale of electric current under this Act throughout such district.

Section 8. Public service transmission lines, not a part of the major public service transmission system to which any such transmission district is assigned, existing in such district at the time of its creation by such division or redivision, shall not be affected by such creation, and the Board may in its discretion permit at any time the construction, operation, and maintenance, in and across any such district, of new public service¹³ transmission lines not a part of the public service transmission system to which such district is assigned, but such new lines shall not deliver current to any public service distribution system within such district.

Section 9. The Board and the Commission shall severally have power to perform any and all Acts, to make such rules, regulations, and orders, and to prescribe such forms as may be necessary and proper for the administration of this Act.

Section 10. In the administration of this Act the practice and procedure before the Commission, and upon appeal, shall so far as applicable be that provided by Article Six of the Public Service Company Law approved the twenty-sixth day of July, one thousand nine hundred and thirteen (Pamphlet Laws thirteen hundred and seventy-four), and the supplements and amendments thereto.

Section 11. The Provisions of this Act are hereby declared to be severable one from another, and servable as to the common purchasers and common sellers, persons, public service companies, and subject matters respectively herein dealt with, and, if for any reason one or more of such provisions be judicially held to be unconstitu-

¹¹"Section 5 of 1925 HR 1057 is here omitted from this bill. It read: Section 5. No person operating as a common carrier under this Act shall himself generate or himself distribute directly to consumers electric current for light, heat, or power, or any of them, nor, if an incorporated company, engage in any business forbidden to common carriers by the Constitution of this Commonwealth. Every person required by this Act to operate a major public service transmission system as a common carrier shall before January first, one thousand nine hundred and twenty-six, divest himself of every ownership or interest hereby forbidden by segregation into separate corporations, one of which may be a common carrier transmission company, or otherwise.

¹²The words: "To public service distribution systems in such districts, and to actual and potential connecting carriers." were added to the end of this sentence in 1925 HR 1057.

¹³The word "service" was omitted in 1925 HR 1057.

tional as to any particular common purchaser and common seller, person, public service company, or subject matter, or otherwise, such holding shall not affect the validity of such provision or provisions as applicable to other common purchasers and common sellers, persons, public service companies, or subject matters dealt with hereby, or the validity of the remaining provisions of this Act. It is hereby declared that such provision or provisions and the remaining provisions would have been enacted notwithstanding such holding.

Section 12. All Acts and parts of Acts inconsistent with this Act are hereby repealed.

SENATE BILL NO. 34

Providing for the regulation of electric utilities.

(The wording of this bill, except where otherwise noted, is the same as that of 1925 HR 1047).

Section 1. Be it enacted, &c., That this Act may be cited as the Electric Utilities Act one thousand nine hundred and twenty-six.¹

Section 2. That where used in this act singular words shall be construed as including the plural, masculine words shall be construed as including the feminine and neuter, and the following terms shall have the following meanings respectively designated for each:

"Board" (See Standard Definitions).

"Commission" (See Standard Definitions).

"Distribution system" (See Standard Definitions).

"Public service distribution system" (See Standard Definitions).
(See foot note²)

"Giant power company" (See Standard Definitions).
(See foot note³).

"Public Service" (See Standard Definitions).

"Electric utility" (See Standard Definitions).

"Net investment"⁴ (See Standard Definitions).

"Additional fair value" (See Standard Definitions).

"Public service generating company" (See Standard Definitions).

"Transmission line" (See Standard Definitions).

"Transmission system"⁵ (See Standard Definitions).

"Transmission district" (See Standard Definitions).

Section 3. Any electric utility which has been heretofore incorporated, or, if not a corporation, has heretofore begun to generate, transmit, and distribute, or any of them, in public service, electric current for light, heat, and power, or any of them, may accept the provisions of Section four of this Act by a writing under its corporate seal, if it be a corporation, filed in the office of the Secretary of the Commonwealth and in duplicate with the Commission, and thereupon such electric utility shall be subject to the provisions of said Section, and, if it be a corporation, said provisions shall be

¹"Twenty-five" in 1925 HR 1047.

²"Transmission System" was defined in 1925 HR 1047. (See Standard Definitions).

³The definition of "common carrier transmission company" was included here in 1925 HR 1047 (See Standard Definitions).

⁴Compare this definition of "net investment" with that used in 1926 S. 37. (See Standard Definitions).

⁵See foot note 2

deemed and taken to be conditions of its charter of incorporation to all intents and purposes.

Section 4. In the making and regulation of the rates of any electric utility which is hereafter incorporated,⁶ such rates shall be so made or fixed as to afford such electric utility from its business as a whole, if efficiently conducted, a reasonable opportunity for a return upon its net investment, plus additional fair value, if any, at a rate reasonably sufficient from time to time to attract into the enterprise new money in sufficient volume to meet the needs of its public service duty. If, and so long as any system of rates, and/ or any regulation of facilities, and/ or service fixed or made by the Commission, affords as a whole such reasonable opportunity for such return, no part thereof, shall be deemed confiscatory or be changed or abolished by any court or authority other than the Commission.

Section 5. The exercise, use, or enjoyment, and the commencement of exercise, use, or enjoyment, by any electric utility described in Section three of this Act, of any of the following enumerated rights, franchises, or privileges otherwise allowed but not required by law, is hereby prohibited, unless and until it shall have accepted the provisions of Section four of this Act as provided in said Section three, that is to say:

(a) The right of eminent domain;

(b) The right to acquire hereafter, or to hold, if acquired hereafter, any right of ownership, or voice in management by stockholding, or otherwise, in any other electric utility;

(c) The right to begin the exercise of any right, power, franchise, or privilege under any ordinance, municipal contract, or otherwise;

(d) The right to become incorporated, organized, or created, or if a corporation, to renew its charter or obtain any additional rights, powers, franchises, or privileges, by any amendment or supplement to its charter, or otherwise;

(e) The right to buy or sell, assign or accept assignment of, transfer or accept transfer of, lease, consolidate, or merge, its property, powers, franchises, or privileges, or any of them, to or from, or with those of, any other electric utility.

Provided: That nothing in this Section shall be construed to prevent any segregation⁷ of the ownership of any transmission system from the ownership of any electric generating station or distribution system, nor to prevent, or condition the incorporation of, or require the acceptance of, the provisions of Section four of this Act by any⁸ corporation, the organization of which is reasonably necessary or convenient to effect such segregation.

⁹Section 6. In the regulation of the rates of any electric utility which has been heretofore incorporated or, if not a corporation, which has been heretofore begun to generate, transmit, and distribute, or any of them, in public service, electric current for light, heat, and power, or any of them, and which shall not have accepted the provisions of Section four hereof, the Commission shall as the

⁶The following words were inserted here in 1925 HR 1047: "—, or if not a corporation, hereafter begins to generate, transmit, and distribute, or any of them, in public service, electric current for light, heat, and power, or any of them, —"

⁷The following words were inserted here in 1925 HR 1047: "—required by any present or future law of this Commonwealth—"

⁸The following words were inserted here in 1925 HR 1047: "—common carrier transmission company or other—"

⁹This section did not appear in 1925 HR 1047.

presumptive rate-base take the rate-base prescribed by said Section four and shall fix rates accordingly as in that Section required. Provided: That, withindays after the making of such order, such electric utility may, by petition to the Commission, demand a valuation of its property used and useful in public service. Upon such demand the rates so theretofore fixed under this Section shall be suspended and the Commission shall proceed to fix rates under the Public Service Company Law, as amended to the twelfth day of January one thousand nine hundred and twenty-six, inclusive.

¹⁰Section 7. The Commission shall have power and it shall be its duty in the exercise of the powers by this act and otherwise granted for the regulation of the facilities services and rates of electric utilities:

(a) To establish and re-establish a simple classification of service patrons, and rates to all, or an yclass of, or of any single electric utility, which classification may, in the discretion of the Commission, take into account the kind, quantity, and time of use as these affect the cost of current and of service.

Provided: That any electric utility may establish such classification for itself unless and until the Commission shall have established a classification hereunder applicable to such electric utility;

(b) To make in rate fixing provisions just to consumers and to the public, and equitable to any electric utility affected thereby, for the amortization over a term of years of all or any part of any equipment generating current at a high unit cost, which equipment is to be disused because of the purchase of relatively low cost current;

(c) To permit the extension of the facilities and service of any publicly owned public service distribution system to any territory within the same transmission district which is not served, or is, in the opinion of the Commission, inadequately served with electric current for light, heat, and power; also reasonably to require or to permit such extension of the facilities and service of any other electric utility;

(d) To annul in its discretion after due notice and hearing the charter rights, and/or other rights of any electric utility to supply to the public electric current for light, heat, and power, or any of them, in any chartered or other territory, or part thereof, which the Commission shall find not to be served or adequately served by such electric utility;

(e) To regulate and reform contracts in this subsection hereafter specified by, between, or among, electric utilities to the same extent as the Commission is by this Act and otherwise by law empowered to regulate the facilities, service, or rates of electric utilities, that is to say: Contracts of construction, lease or management, contracts for purchase or sale or exchange of current, contracts for the carriage of current, and contracts of brokerage or agency in respect of any contract in this subsection before described;

(f) To require at any time from any public utility full information about, and to ascertain and fix the additional fair value of, the property thereof;

(g) To regulate, as provided in Section eight¹¹ hereof, the issue of securities by electric utilities;

¹⁰Section 7 of this Act is the same as Section 6 of 1925 HR 1047.

¹¹The word "eight" was substituted for "seven" in 1925 HR 1047.

(h) To prescribe rules and regulations for the establishment of a system of accounts, and for the maintenance thereof by electric utilities,¹² to examine all books and accounts of such electric utilities¹² at any time; to require them to submit at such time or times as the Commission may require statements and reports, including full information as to assets and liabilities, capitalization, net investment, and reduction thereof, additional fair value, gross receipts, interest due and paid, depreciation and other reserves, cost of property, cost of maintenance and operation of the property, cost of renewals and replacements of structures, and as to depreciation of structures, and as to production, reception, carriage, delivery, use, and sale of current, also to require an electric utility to make adequate provision for currently determining said cost and other facts. All such statements and reports shall be made upon oath unless otherwise specified and in such form and on such blanks as the Commission may require. Any person, who, for the purpose of deceiving, makes or causes to be made any false entry in the books or the accounts of any electric utility, and any person, who, for the purpose of deceiving, makes or causes to be made any false statement or report in response to a request or order or directions from the Commission for the statements and reports herein referred to, shall upon conviction be fined not more than two thousand dollars, or imprisoned not more than five years, or both;

(i) To hold hearings and to order testimony to be taken by deposition at any designated place in connection with any inquiry or proceeding under this Act;

(j) To require by subpoena, signed by any member of the Commission, the attendance and testimony of witnesses and the production of documentary evidence from any place within the Commonwealth, and, in case of disobedience to a subpoena, the Commission may invoke the aid of any court of the Commonwealth in requiring the attendance and testimony of witnesses and the production of documentary evidence. Any member, expert, or examiner of the Commission, when duly designated by the Commission for such purposes, may administer oaths and affirmations, examine witnesses, and receive evidence. Depositions may be taken before any person designated by the Commission, or by its Secretary, and empowered to administer oaths. They shall be reduced to writing by such person, or under his direction, and subscribed by the deponent. Witnesses summoned before the Commission shall be paid fees and mileage allowances equal to those paid witnesses in the Courts of the Commonwealth, and witnesses whose depositions are taken and persons taking the same shall be entitled to fees equal to those paid for like services in the Courts of the Commonwealth;

(k) To perform any and all such acts, to make such rules and regulations, to prescribe such forms, and to issue such orders, not inconsistent with this Act, as may be necessary and proper for the purpose of carrying out the provisions of this Act.

Section 8. Upon the approval of the Commission evidenced by its certificate of public convenience first had and obtained, and not otherwise, it shall be lawful for any electric utility being a corporation to issue stocks, trust certificates, bonds, notes, or other evidences of indebtedness, payable at periods more than three years

¹²"Electric utilities" substituted for "permittees hereunder" in 1925 HR 1047.

after the date thereof, to such amount and in such denominations as the Commission shall have found from time to time and so evidenced to be reasonably necessary for the purpose for which such issue has been authorized by such electric utility, taking into consideration any resources of such electrical utility available or which might be available for such purpose. The application of the proceeds to any other purpose is hereby prohibited. All such stock shall have a fixed par value approved by the Commission and so evidenced. If any such electric utility increases its capital stock, the new shares shall, except as herein otherwise provided, be offered proportionately to its stockholders at such price not less than par as its directors may fix. The finding of the Commission, as above provided, as to the amount of stock reasonably necessary for the purpose for which such increase has been authorized, shall be based on the price fixed by the directors, unless the Commission deems that such price is so low as to be inconsistent with public interest, in which case the Commission may fix the price at which such shares may be issued. The directors, upon the approval of such increase and the fixing of the price as herein provided, shall cause written notice of such increase to be given to every stockholder who was such at the date of the vote to increase, stating the amount of such increase, the number of shares or fractions of shares to which he, according to the proportionate number of his shares at the date of such vote, is entitled, the price at which he may take them, and fixing a time not less than fifteen days after the date of such determination within which he may subscribe for such additional stock. Provided: That, when the capital stock of the corporation consists of preferred and common stock,¹³ the by-laws or amended by-laws of the corporation may provide that the holders of preferred stock only shall be entitled to subscribe for new or additional preferred stock, and that the holders of common stock only shall be entitled to subscribe for new or additional common stock and that notice of such increase as aforesaid need be given only to the stockholders so entitled to subscribe. Every stockholder entitled to subscribe as aforesaid may within the time limited, subscribe for his portion of the stock which shall be paid for in cash before the issue of a certificate therefor. All votes and proceedings relative to the increase, and all rights of stockholders to subscribe for the new shares, shall be void unless the directors, after the vote to increase and within sixty days after final action of the Commission, shall cause written notice of such increase to be given as herein provided, or, if such increase is within the next following proviso of this Section, shall dispose of the same as therein set forth.¹⁴

Provided further: That, if any such increase does not exceed four per cent of the existing stock of the company, the directors, without first offering the shares to the stockholders, may sell them by auction or by tender to the highest bidder in such manner, at such times, and upon such terms, not less than par to be paid in cash, as the directors shall determine. Any shares heretofore or hereafter authorized, which under the provisions of this section remain unsubscribed for by the stockholders entitled to take them, may be sold by the directors at public auction, or may be disposed of

¹³The words —, "the agreement or amended agreement of association, or—" were inserted here in 1925 HR 1047.

¹⁴The words "set forth" were substituted for the word "provided" in 1925 HR 1047.

at such price not less than par, or at such price less than par as may have been authorized by the Commission under this Section,⁵ and upon such terms, and in such manner as the directors may deem advisable, subject to the approval of the Commission. Such shares as are sold at¹⁶ auction shall be offered for sale in Philadelphia, or in such other city or town as the Commission prescribes, and notice of the time and place of the sale shall be published at least five times during the ten days immediately preceding the sale, in each of three at least of such daily newspapers as the Commission may prescribe.

It is the intent of this Section that the amount of securities of any electric utility at any time outstanding shall correspond as nearly as practicable with the net investment, plus the additional fair value, if any, of the property of such electric utility.

¹⁷Section 9. Any electric utility, with the approval of the Commission evidenced by its certificate of public convenience, may sell electric current to any other electric utility for delivery within this Commonwealth, but every such contract shall be subject to the provisions of subsection (c)¹⁸ of Section seven¹⁹ of this Act.

Section 10. No foreign corporation, organized under the laws of any other state or nation, shall hereafter begin to generate, transmit, and/or distribute in public service in this Commonwealth electric current for light, heat, and power, or any of them.

Section 11. Any electric utility or any person, who shall wilfully fail, or who shall refuse, to comply with any of the provisions of this Act, or with any subpoena of the Commission hereunder, or relating²⁰ to the administration hereof, or with any regulation or lawful order of the Commission issued or made in accordance with the provision of, or for the proper administration of, this Act, shall be deemed guilty of a misdemeanor, and on conviction thereof, shall in the discretion of the Court be punished by a fine of not exceeding one thousand dollars in addition to other penalties herein prescribed or provided by law, and every month any such electric utility or any such person²¹ shall remain in default after written notice from the Commission shall be deemed a new and separate offense punishable as aforesaid.

²²Section 12. The definition of "Public Service Company" in Section one Article one of²³ the Public Service Company Law, approved the twenty-sixth day of July, one thousand nine hundred and thir-

¹⁵The words "under this section" were substituted for "as provided above" in 1925 HR 1047.

¹⁶The word "at" was substituted for "by" in 1925 HR 1047.

¹⁷The following section (Section 8 of 1925 HR 1047) is omitted in this bill. It was included at this point in the 1925 bill.

Section 8. The Act approved the twenty-ninth day of April, one thousand eight hundred and seventy-four (Pamphlet Laws seventy-three), entitled: "An Act to provide for the incorporation and regulation of certain corporations", as amended, is hereby supplemented by adding thereto, under "Corporations for Profit, Second Class," the following paragraph:

XXVIII. The generation by any prime mover of electric current for the supply of the public with light, heat, and power by delivery of the current so generated directly to, or through one or more carriers to a public service distribution system.

¹⁸The letter (c) was substituted for (e) in 1925 HR 1047.

¹⁹Section 6 of 1925 HR 1047.

²⁰The words "or relating" were substituted for "with respect" in 1925 HR 1047.

²¹The word "who" was included in 1925 HR 1047.

²²The following section (Section 12 of 1925 HR 1047) is omitted here in this bill:

Section 12. In any suit to set aside or modify, or to compel or prevent the making or enforcement of, any rule, regulation, or order by the Commission under this Act, the Attorney General may file with the Prothonotary of the Supreme Court in the district wherein such suit is pending a certificate that in his opinion the suit is of such general public importance as to require the removal to the Supreme Court. Thereupon the Supreme Court shall by appropriate order direct such removal and cause the record in the case to be filed in the Supreme Court for final disposition. Upon such filing the suit shall be given precedence over others and in every way be expedited and shall be assigned for hearing at the earliest practicable day.

teen (Pamphlet Laws one thousand three hundred and seventy-four), is hereby amended to read as follows:

The term "Public Service Company" when used in this Act includes all railroad corporations, canal corporations, street railway corporations, stage line corporations, express corporations, baggage transfer corporations, pipe line corporations, ferry corporations, common carriers, Pullman car corporations, dining car corporations, tunnel corporations, turnpike corporations, bridge corporations, wharf corporations, incline plane corporations, grain elevator corporations, telegraph corporations, telephone corporations, natural gas corporations, artificial gas corporations, giant power companies, companies organized for the generation by any prime mover of electric current for the supply of the public with light, heat, and power, or any of them, by delivery of the current so generated directly to, or through one or more carriers, to a public service distribution system, companies organized to transmit electric current for the supply of the public by delivery of the current so transmitted directly to or through one or more other carriers, to a public service distribution system, and any other²⁴ electric corporations, water corporations, water-power corporations, heat corporations, refrigerating corporations, sewage corporations, doing business within this State, and also all persons engaged for profit in the same kind of business within this Commonwealth. Provided however: Such persons and corporations shall not be subject to the provisions of this Act with respect to any business transacted, or any property owned by them, outside of the Commonwealth of Pennsylvania, nor shall the provisions of this Act be so construed as to extend to any matter or thing which, under the Federal Constitution, the Congress of the United States has the exclusive power to regulate, or which the Congress has under said constitution in the exercise of its concurrent power in fact regulated to the exclusion of the concurrent power of the several States. And provided further: That none of the provisions of this Act shall apply to the generation, transmission, or distribution of electricity, to the manufacture or distribution of gas, to the furnishing or distribution of water, or to the production, delivery, or furnishing of steam, or any other substance for heat or power, by a producer who is not otherwise a public service company, for the sole use of such producer, or for the use of tenants of such producer, and not for sale to others.

Section 13. It is the intent of this Act to secure for the railroads, industries, farms, and homes of and throughout this Commonwealth an abundant and cheap supply of electric current for light, heat, and power, and it shall be broadly construed to that end. Nothing in this Act shall be construed to limit or narrow the existing powers of the Commission available to that end.

Section 14. The provisions of this Act are hereby declared to be severable one from another, and severable as to the electric utilities, persons, corporations, and subject matters respectively herein dealt with, and if for any reason one or more of such provisions be judi-

²³The words "Section one Article one of" were omitted in 1925 HR 1047.

²⁴These underlined words were substituted for the following in 1925 HR 1047, Section 13: "Giant power companies, common carrier transmission companies authorized under any law of this Commonwealth to own, and or operate a public service distribution system, and any other."

cially held to be unconstitutional as to any particular person, corporation, electric utility, or subject matter, or otherwise, such holding shall not affect the validity of such provision or provisions as applicable to other persons, corporations, electric utilities, or subject matters dealt with thereby, or the validity of the remaining provisions of this Act. It is hereby declared that such provision or provisions and the remaining provisions would have been enacted notwithstanding such holding.

C. OTHER HOUSE BILLS, SESSION OF 1925 .

HOUSE BILL NO. 1048

Authorizing the purchase by the Commonwealth of land strips for the transmission lines of Giant Power Companies.

Section 1. Be it enacted, &c., That this act may be cited as The Giant Power Transmission Location Act one thousand nine hundred and twenty-five.

Section 2. Where used in this act singular words shall be construed as including the plural, masculine words shall be construed as including the feminine and neuter, and the following terms shall have the following meanings respectively designated for each:

“Board” (See Standard Definitions).

“Reservation” (See Standard Definitions).

“Transmission line” (See Standard Definitions).

“Giant power company” (See Standard Definitions).

“Giant power permit” (See Standard Definitions).

“Giant power transmission line” (See Standard Definitions).

Section 3. The Board is hereby authorized and directed, from time to time, in its discretion, to designate strips of land not exceeding six hundred and sixty feet in width, which the Board shall deem necessary, and convenient for occupancy and use by giant power transmission lines.

Section 4. For said purpose the Board is hereby authorized to acquire, by purchase, or condemnation, for, and in the name of the Commonwealth, lands and other property within the strips so designated, not already owned by the Commonwealth, to the extent that such acquisition shall have been authorized from time to time by the transmission lines for carriage, thence to such distribution—legislative appropriation of moneys to pay for the same.

Section 5. The Board shall have power, in its discretion, to issue permits, in writing, as to lands owned by the Commonwealth within the strips so designated, authorizing the use of right-of-way for giant power transmission lines, for pipe lines, to carry in public service natural gas, manufactured gas, oil, or any other gaseous or liquid substance, or for any other public service purpose not inconsistent with use by giant power transmission lines. Provided: That as to any portion of such strips within any reservation, permit shall be issued under this act, only after the Board shall have found that such permit will not interfere, or be inconsistent, with the purpose for which such reservation was created or acquired, and every such permit shall be subject to such conditions expressed therein, as the

head of the Department, under whose supervision such falls, shall deem necessary for the adequate protection and utilization of such reservation.

Section 6. Every permit issued under this act shall be limited to such period not exceeding fifty years, as the Board shall determine and set forth therein. Provided: That the permittee shall be entitled to extension and renewal of the permit upon the terms thereof, until the permittee shall have received through re-capture or purchase by the Commonwealth, or by a duly authorized subsequent permittee, repayment of the money prudently invested upon the faith of the permit, plus such reasonable damages, if any, to property of the permittee, valuable, serviceable, and dependent for its usefulness upon the continuance of the permit, but not recaptured, or purchased as may be caused by the severance therefrom, of the property taken.

Section 7. Every permit issued under this act shall be subject to such reasonable annual charge, specified therein, as the Board shall fix, for the purpose of amortizing in fifty years the cost to the Commonwealth of the acquisition of such land strips, with interest computed from the date of the issuance of the permit.

The proceedings for the condemnation of lands, and other property, under section four of this act, and for the ascertainment, recovery, and payment, of damages arising from such condemnation, shall be taken in the manner provided by the act, approved the twentieth day of May, one thousand nine hundred and twenty-one (Pamphlet Laws page nine hundred and eighty-four), entitled "An act providing for the condemnation by the Commonwealth, of lands suitable, and desirable, for forest purposes, or game preserve purposes, or the perpetuation and protection of fish, and defining the powers and duties of the Department of Forestry, the Board of Game Commissioners, and the Department of Fisheries, respectfully in relation thereto."

HOUSE BILL NO. 1052

Authorizing the use of railroad and highway rights of way for Giant Power transmission lines.

Section 1. Be it enacted, &c., That where used in this Act singular words shall be construed as including the plural, masculine words shall be construed as including the feminine and neuter, and the following terms shall have the following meanings respectively designated for each:

"Board" (See Standard Definitions).

"Giant power company" (See Standard Definitions).

"Giant power permit" (See Standard Definitions).

"Giant power transmission line" (See Standard Definitions).

Section 2. Any giant power company holding a giant power permit, may occupy and use, during the period of such permit for giant power transmission lines, any lands, servient, or adjacent, to any right-of-way for railroad, or highway purposes, as to which lands, the Board, after due notice and public hearing, shall have found that the appropriation of the same is required by the present and future interests of the Commonwealth for the construction, maintenance, or operation of such transmission line and is not,

incompatible with the public interests of the region in the vicinity of such lands.

Section 3. Nothing in this Act shall be construed to authorize the taking of private property for public use, except upon payment, or the securing of, just compensation, to be ascertained and adjudged by due process of law.

HOUSE BILL NO. 1051

Providing for condemnation by Giant Power Companies and regulating condemnation for major transmission lines.

Note: Section 1 is the short title and Section 2 gives certain standard definitions. The remaining sections correspond to sections 3, 4, and 5 of Senate Bill 32, Session of 1926 (ante p—) to which the reader is referred.

HOUSE BILL NO. 1362

Authorizing the condemnation of leaseholds in coal deposits by Giant Power Companies.

Section 1. Be it enacted, &c., That this Act may be cited as the Giant Power Coal Condemnation Act.

Section 2. That, where used in this Act, singular words shall be construed as including the plural, masculine words shall be construed as including the feminine and neuter, and the following terms shall have the following meanings respectively designated for each:

The term "person" includes natural persons, partnerships, associations, corporations, and municipalities.

"Board" (see Standard Definitions)

"Giant power company" (see Standard Definitions)

"Giant power permit" (see Standard Definitions)

Section 3. Any giant power company holding a giant power permit shall have the right and power to condemn and appropriate the exclusive right to mine coal on specific lands, not to exceed a quantity reasonably estimated by the Board to be sufficient to supply, for not more than fifty years, the generating station of such giant power company and its works, for the recovery of coke, gas, tar, ammonia, and other by-products of coal, before steam raising, and for the manufacture of chemicals, operated as incidents to the generation of electric current in such generating station, as to which right to mine, the Board shall have found, after due notice, and hearing, that its appropriation is required by the present, and future interests, of the Commonwealth, for the operation of such generating station and works, and is not incompatible with the public interest of the region in the vicinity of such lands. Such right to mine shall be in the nature of a leasehold, upon conditions including the time of payment of annual rental during period of non-operation or of annual royalty fixed in such finding, and the compensation, therefor, shall be fixed in the condemnation proceedings in the form of such rental and royalty per ton of coal mined, to be secured before the taking, plus such reasonable severance damages, if any, to property of the person from whom such right to

mine is taken, as is valuable, serviceable, and dependent, for its usefulness, upon the continued ownership, by such person, of such right to mine, but is not appropriated. Such severance damages shall be paid or secured before the taking.

Section 4. All damages arising from the exercise of the right and power of condemnation, conferred by Section Three of this Act, shall be ascertained, recovered, and paid as provided by the forty-first section of the Act, approved April twenty-ninth, one thousand eight hundred and seventy-four (Pamphlet Laws seventy-three), and the amendments and supplements thereto. Provided: That such damages other than severance damages shall be ascertained, recovered, and paid in the form of annual rental during periods of non-operation, or of annual royalty, and, as to damages so ascertained as annual rental or royalty, execution shall issue only if the amount of the first year's rental or royalty be not paid within thirty days after the entry of judgment, or if the amount of any subsequent year's rental or royalty be not paid within thirty days after the day fixed for the payment thereof, by such finding of the Board. And Provided further: That the right to annual rental or royalty ascertained by a final Judgement under said forty-first section, shall be a first lien upon the right to mine coal, in respect of which it shall have been entered, shall so continue during the continuance of such right to mine, prior to every encumbrance upon such right to mine of any kind whatsoever, thereafter arising, which lien shall be deemed and taken to be sufficient security for the payment of the rental or royalty, ascertained by such judgment.

Section 5. The provisions of this Act are hereby declared to be severable from one another, and severable as to the persons, corporations, and subject-matters herein dealt with, and if, for any reason, one or more of such provisions be judicially held to be unconstitutional as to any particular person, corporation, or subject-matter, or otherwise, such holding shall not affect the validity of such provisions as applicable to other persons, corporations, or subject-matters, dealt with thereby, or the validity of the remaining provisions of this Act. It is hereby declared that such provision, or provisions, and the remaining provisions would have been enacted notwithstanding such holding.

HOUSE BILL NO. 1046

Authorizing the negotiation of interstate compacts, for ratification by the General Assembly, to regulate interstate transmission of electric power.

Section 1. Be it enacted, &c., That the Giant Power Board shall have power to negotiate from time to time, with any State of the Union, and any Canadian province, within practicable electric transmission distance, or with any one such State, or Province, compacts in accordance with the Constitution of the United States, for adoption, or rejection, by the General Assembly, for the purpose of regulating interstate, or international, or both transmission and sale, or delivery, of electric current for use in public service, upon principles of mutuality, equality, justice, and efficiency. Every compact so negotiated shall be submitted by the Governor to the General Assembly, and the Congress of the United States having consented

thereto, shall be in full force and effect upon its ratification by a duly enacted law of this Commonwealth, and by the other party, as its law may prescribe.

HOUSE BILL NO. 1044

Prohibiting to corporations, public service companies, and municipalities the enlargement of existing interstate business in electric power except under interstate compacts.

Section 1. Be it enacted, &c., That this Act shall be known and may be cited as, The Interstate Electric Transmission Act 1925.

Section 2. Where used in the Act, singular words shall be construed as including the plural, masculine words shall be construed as including the feminine and neuter, and the following terms shall have the following meanings respectively designated for each:

- “Board” (See Standard Definitions).
- “Transmission line” (See Standard Definitions).
- “Public service transmission line” (See Standard Definitions).
- “Major line” (See Standard Definitions).
- “Public service major line” (See Standard Definitions).
- “Minor line” (See Standard Definitions).
- “Public service minor line” (See Standard Definitions).
- “State” (See Standard Definitions).
- “Interstate line” (See Standard Definitions).
- “Licensed line” (See Standard Definitions).
- “Unlicensed line” (See Standard Definitions).
- “Retail delivery” (See Standard Definitions).
- “Wholesale delivery” (See Standard Definitions).
- “Retail outstate delivery” (See Standard Definitions).
- “Wholesale outstate delivery” (See Standard Definitions).
- “Existing” (See Standard Definitions).
- “Future” (See Standard Definitions).

Section 3. The Board shall have power in its discretion to license the construction, maintenance, and operation of interstate public service major lines in pursuance of any compact then in force with any state, and/ or any Canadian province made in accordance with the Constitution of the United States, for the purpose of regulating interstate, or international, or both transmission and sale, or delivery, of electric current for use in public service. The construction, maintenance, or operation within this Commonwealth of any future interstate public service major line, or part thereof, not authorized by such a license, or of any future interstate public service minor line, or part thereof, whatsoever, is hereby prohibited.

Section 4. Every corporation, public service company, and municipality is hereby prohibited;

(a) To make wholesale outstate deliveries over any future unlicensed interstate line;

(b) To make wholesale outstate deliveries over any existing unlicensed interstate major or minor line, and to make wholesale outstate deliveries over any interstate minor line, and to make retail outstate deliveries over any interstate major or minor line; except

(I) In fulfillment, as to recipients and quantities of existing contracts and renewals thereof; or

(II) in lieu, wholly, or in part, of such fulfillment in continuance of delivery, without increase of quantity at points of delivery fixed by existing contracts.

Section 5. Every corporation, public service company, and municipality, is hereby prohibited to make future contracts for wholesale or retail outside deliveries over unlicensed interstate lines; except

(a) Contracts in renewal of existing contracts without change of recipients, and without increase of quantities to be delivered; or

(b) Wholly, or in part, in lieu of such renewal contracts for continuing delivery without increase of quantity at points of delivery fixed by existing contracts.

Section 6. Outstate deliveries by any corporation, public service company, or municipality, discriminating in favor of recipients outside this Commonwealth, and against recipients, or potential recipients within this Commonwealth, are hereby prohibited. All existing and future contracts by any corporation, public service company, or municipality, for wholesale or retail outstate delivery, shall be subject to regulation and reformation by the Public Service Commission of the Commonwealth of Pennsylvania, so far as necessary to prevent such discrimination.

HOUSE BILL NO. 1050

Amending the Limited Power Permit Act of June 14, 1923, P. L. 704 and the Condemnation Act of the same date, P. L. 700.

Section 1. Be it enacted, &c., That the Act approved the fourteenth day of June, one thousand nine hundred and twenty-three (Pamphlet Laws page seven hundred and four), entitled "An Act relating to limited power permits, and limited water supply permits from the Water Supply Commission of Pennsylvania, and the conditions thereof, to the flooding and use by holders of limited power permits, of islands owned by the Commonwealth, to the the unlawful use for water, or steam power development of dams, and changes in streams hereafter constructed or made otherwise than under limited power permits, and to proceedings for the enforcement of this act," is hereby amended to read as follows:

Section 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met, and it is hereby enacted by the authority of the same: That where used in this act singular words shall be construed as including the plural, masculine words shall be construed as including the feminine and neuter, and the following words shall have the following meanings respectively designated for each:

The term ["Commission"]¹ "*board*" means the Water [Supply Commission of Pennsylvania] and *Power Resources board*.

The term "dam" means an obstruction, dam, wall, wing wall, wharf, embankment, abutment, projection, or similar analogous structure, or any other obstruction whatever, in, along, across, or projecting into, any stream, or body of water, wholly or partly within, or forming part of, the boundary of this Commonwealth, except the tidal waters of the Delaware River, and of its navigable tributaries.

¹In accordance with Pennsylvania legislative procedure. Words printed in brackets are to be omitted from, and words in italics are inserted in, the Act to be amended.

The term "dam to develop water power" means a dam for the purpose of developing water power only, or a dam for said purpose, and for any other purpose.

The term "dam to supply water for steam power" means a dam for the main purpose of storing, cooling, and using, or any of them, water for steam raising or steam condensation, or both, in the generation of electric energy for use in public service which is not a dam to develop water power as hereinbefore defined.

The term "water supply dam" means a dam for the purpose of supplying water, which is not a dam to develop water power, nor a dam to supply water for steam power as hereinbefore defined.

The term "power dam" includes dams to develop water power and dams to supply water for steam power.

The term "change in stream to develop water power" means any change in, or diminution of, the course, current, or cross-section, of any stream, or body of water, for the sole purpose of developing water power or for said purpose, and any other purpose, whether the dam, or other means effecting the change, be within or without the Commonwealth of Pennsylvania.

The term "change in stream to supply water for steam power" means any such change or diminution, for the main purpose of storing, cooling, diverting, and using, or any of them, water for steam raising or steam condensation, or both, in the generation of electric energy for use in public service which is not a change in stream to develop water power, as hereinbefore defined, whether the dam or other means effecting the change be within or without the Commonwealth of Pennsylvania.

The term "change in stream for water supply" means any such change, or diminution, for the purpose of supplying water which is not a change in stream to develop water power, nor a change in stream to supply water for steam power as hereinbefore defined, whether the dam or other means effecting the change, be within or without the Commonwealth of Pennsylvania.

The term "change in stream to develop power" includes changes in stream to develop water power, and changes in stream to supply water for steam power.

The term "limited power permit" means a permit for a power dam, or for a change in stream to develop power, or both, granted under this act.

The term "limited water supply permit" means a permit for a water supply dam, or for a change in stream for water supply, or both, granted under this act.

The term "power project" means a complete unit of improvement or development for the supply of water power, or for the procuring, or supply, or both, of light, heat, and power, or any of them, by electricity, consisting of a power dam or change in stream to develop power, or both, for which a limited power permit at any time is being sought, or has been granted, a power house, water conduits all dams and appurtenant works which are a part of said unit, and all storage, diverting, or forebay reservoirs directly connected therewith, the primary line or lines, transmitting power from the power house to the point of junction with the distribution system, or with an interconnected primary transmission systems, all miscellaneous structures used, and useful, in connection with such

unit or any part thereof, and all water rights, rights of way, ditches, dams, reservoirs lands, or interests in lands, the use and occupancy of which are necessary or appropriate, in the construction, maintenance, and operation, of such unit.

The term "water supply project" means a complete unit of improvement or development, for the procuring or supply, or both, of water which is not a power project as hereinbefore defined, consisting of a water supply dam, or change in stream, for water supply, or both, for which a limited water supply permit at any time is being sought, or has been granted, a reservoir, the dam, and other works appurtenant thereto and all primary water conduits leading immediately therefrom to the point of junction with the distribution system, or with an interconnected primary water conduit, and all water rights, rights of way, ditches, dams, reservoirs, and lands, or interests in lands the use and occupancy of which is necessary or appropriate in the construction, maintenance, and operation, of such unit.

The term "permittee" means the holder of a limited power permit, or a limited water supply permit and his heirs, successors, and assigns.

The term "navigable waters of the United States" means those parts of streams or other bodies of water, over which Congress has jurisdiction under its authority to regulate commerce with foreign nations, and among the several States, and, which either in their natural or improved conditions [S], notwithstanding interruptions between the navigable parts of such streams or waters, by falls, shallows, or rapids, compelling land carriage, are used, or suitable for use, for the transportation of persons or property in interstate or foreign commerce, including therein, all such interrupting falls, shallows, or rapids, together with such other parts of streams as shall have been authorized by Congress for improvement by the United States, or shall have been recommended to Congress for such improvement, after investigation under its authority.

Section 2. A power dam or change in stream to develop power, shall be deemed to be within the jurisdiction of the United States, within the meaning of this section, whenever; (1) such dam *being a dam to develop water power*, or such change *being a change in stream to develop water power*, is constructed, or made, or to be constructed, or made in, or upon navigable waters of the United States, or; (2) the Federal Power Commission shall have found that the interests of interstate or foreign commerce would be affected by the construction of such dam, or the making of such change.

Every permit hereafter granted by the [commission] *board* for the construction of a power dam, or for a change in stream to develop power, not within the jurisdiction of the United States, shall be limited to such periods, not exceeding fifty years, as the said [commission] *board* shall determine and set forth therein Provided: That the permittee shall be entitled to extension and renewal of such permit upon the terms thereof, until the permittee shall have received through recapture or purchase, by the Commonwealth, or by a duly authorized subsequent permittee repayment of the capital prudently invested in the power project, *wholly or in part*, upon the faith of *the* permit plus such reasonable damages, if any, to

the property of the permittee, valuable, serviceable, and dependent, for its usefulness upon the continuance of such permit, but not recaptured or purchased as may be caused by the severance therefrom of property taken.

Every permit hereafter granted by the [commission] *board* for the construction of a *dam to develop water power*, [dam] or for a change in stream to develop water power within the jurisdiction of the United States, shall be on the following conditions which shall be expressed in such permit namely: (a) That the permit shall become null and void, unless within the time specified therein the permittee, (or as to a change in stream within the Commonwealth effected, or to be effected by a dam or other means without the Commonwealth, those constructing or purposing to construct, maintain, or operate, such dam or other means) shall secure from the Federal Power Commission a license for such dam or change, and; (b) that if, and to the extent that, any of the rights or powers set forth, or reserved as rights, or powers, of the United States, in, or pursuant to, the provisions of such license, shall be waived by the United States, or be unenforceable by the United States, then, and to that extent, such rights and powers, (including if so waived or unenforceable, any rights of recapture, extension, or renewal, so set forth or reserved) may be exercised and enforced by the Commonwealth of Pennsylvania, subject to such alterations in plans, specifications, or structures, and such extensions of time for commencing or completing construction as may be made or granted by the Federal Power Commission.

Every permit granted under this section shall be subject to such reasonable annual charge specified therein as the [commission] *board* shall fix, for the purpose of reimbursing the Commonwealth for the costs of administration of this act, and may in the discretion of the [commission] *board* embody such other terms, conditions, and stipulations, as the [commission] *board* shall deem necessary to protect the present and future interests of the Commonwealth and its people in the construction, maintenance, and operation of the project, and in the water and power resources to be utilized thereby, and suitable to secure to the permittee a reasonable opportunity for a fair return on the actual investment, prudently made in the project.

Section 3. The [commission] *board* in granting every limited water supply permit shall specify a reasonable annual charge, in an amount fixed by the [commission] *board* to be paid by the permittee for the purpose of reimbursing the Commonwealth for the cost of administration of this act, and the [commission] *board* shall embody therein, such other terms, conditions, and stipulations, as the (commission) *board* shall deem necessary and proper to protect the present and future interests of the Commonwealth and its people in the construction, maintenance, and operation of the project, and in the water resources to be utilized thereby.

Section 4. It shall be unlawful for any corporation or natural person to use for the development of water power, or for the main purpose of storing, cooling, diverting, and using, or any of them, water for steam raising or steam condensation, or both, in the generation of electric energy for use in public service, any dam constructed under any permit hereafter issued, otherwise than under section two

of this Act, or to divert or use for said purposes, or for said main purpose, any stream or body of water, the course, current, or cross-section of which shall have been changed or diminished at the point of diversion or use under any permit hereafter granted, otherwise than under section two of this act.

Section 5. Any permittee holding a permit granted under section two of this act may, with the consent of the [commission] board, which consent may be set forth in such permit, overflow, submerge, and use as appurtenant to the power project, in behalf of which such permit is granted, and subject to the terms, stipulations, and conditions, expressed therein, any island owned by the Commonwealth, in the river Susquehanna, or any of its branches, or in any other stream or water over which the commission has jurisdiction.

Section 6. The provisions of this Act shall not be construed as affecting any permit or authority heretofore granted, or given pursuant to law, for the construction of any dam, or for the changing or diminution of the course, current, or cross-section, of any stream or body of water, but the holder of any such permit or authority may apply for a limited power permit, or a limited water supply permit under this act, and if, and when, any such applicant is granted the same, he shall have all the rights, and be subject to all the duties conferred or imposed by, or under, this Act.

Section 7. The [commission] board is hereby authorized and empowered to make such rules and regulations, and issue such orders as may be necessary and proper for carrying out the provisions of this Act.

Section 8. The Attorney General may on the request of the [commission] board, institute proceedings in any court, now or hereafter by law, clothed with jurisdiction in civil cases in which the Commonwealth is a party, for the purpose of remedying or correcting by injunction, mandamus, or other process, any action of commission, or omission in violation, of the provisions of this Act, or of the terms, conditions, or stipulations, of any limited power permit or limited water supply permit granted hereunder, or of any lawful regulation, or order, promulgated hereunder. In the event of the failure of any permittee to comply with the requirements of any final decree in any such proceedings, the Attorney General may institute proceedings for the purpose of revoking the permit. The said courts shall have jurisdiction over all the above-mentioned proceedings, and shall have power to issue and execute all necessary process, and to make and enforce all rights, orders, and decrees, to compel compliance with the lawful orders and regulations of the [commission] board, in respect of any so permitted dam or appurtenant works, and in respect, of any so permitted change or diminution of the course, current, or cross-section, of any stream or body of water, and to compel the performance of any condition imposed under the provisions of this act. In the event a decree revoking a permit is entered, the court is empowered to sell the whole, or any part of the dam, together with any, or all works, lands, and water rights, appurtenant thereto, or existing under the permit, to wind up the business of such permittee conducted in connection with such dam change or diminution, to distribute the proceeds to the parties entitled to the same and to make and enforce such further orders and decrees as equity and justice may require. At such sale, or

sales, the vendee shall take the rights and privileges belonging to the permittee, and shall perform the duties of such permittee, and assume all outstanding obligations and liabilities of the permittee which the court may deem equitable in the premises.

Section 9. *All annual charges paid to the Commonwealth under the provisions of this act are hereby permanently appropriated to the Water and Power Resources Board, for use in the payment of salaries, and all other necessary expenditures, incident to the administration of this Act.*

Section [9] 10. Nothing in this act shall be construed to deprive the Public Service Commission of the Commonwealth of Pennsylvania of any jurisdiction powers or duties now vested in it by the laws of the Commonwealth.

Section [10] 11. The right to amend and repeal this Act is hereby expressly reserved, but no such alteration, amendment, or repeal, shall affect any permit theretofore issued under the provisions of this Act, or the rights of any permittee thereunder.

Section [11] 12. All Acts and parts of Acts inconsistent with this Act are hereby repealed.

HOUSE BILL NO. 1055

Withdrawing from private appropriation under the public land laws all islands owned by the Commonwealth.

Section 1. Be it enacted, etc., That hereafter no application under the public land laws shall be received, nor shall any warrant be issued, or patent granted, for any island owned by the Commonwealth, in any river, wholly, or partly within, or forming the boundary of this Commonwealth.

HOUSE BILL NO. 1045

Forbidding condemnation and state construction in designated potential reservoir sites without approval of the Water and Power Resources Board.

Section 1. Be it enacted, etc., That the Water and Power Resources Board shall, from time to time, make orders designating the location and extent of sites, wholly, or partly, in this Commonwealth, which in the judgment of the said Board, may be suitable for reservoirs of one hundred million gallons, or more, and the said Board, in its discretion, may at any time amend or rescind any such order.

Section 2. The appropriation and condemnation under any law of the Commonwealth, except the Act approved on the fourteenth day of June, one thousand nine hundred and twenty-three (Pamphlet Laws seven hundred), entitled, "An Act authorizing the condemnation and appropriation of lands, waters, and other property by public service companies holding limited power permits, and limited water supply permits, granted by the Water Supply Commission of Pennsylvania and providing a method for the assessment of damages arising from such appropriation" of any lands or other property within any reservoir site designated by any such order in force and the construction therein, by any other agency or Department of the Commonwealth, of any public works, is hereby prohibited,

unless, and until, the Water and Power Resources Board, after due notice, and public hearing, shall have found that such appropriation, or construction, is required by the present and future interests of the Commonwealth.

HOUSE BILL NO. 1053

Providing for the taxation of the land flooded by reservoirs at the average rate of farming lands in the vicinity.

Section 1. Be it enacted, etc., That lands in any township, owned, or taken, by any corporation for dam reservoir, canal, and power house, or any of them, for the development of hydroelectric power for use, or used, in whole, or in part, in public service, shall be liable to taxation for township and county purposes, and shall be assessed at the average assessed value per acre of the improved farming land in such township.

HOUSE BILL NO. 1360

Authorizing the merging of public service electric companies generating current by water power and steam power or other different prime mover.

Section 1. Be it enacted, etc., That when two or more corporations, all incorporated under the laws of this Commonwealth, and each authorized to supply to the public in this Commonwealth, electric current for light, heat, and power, or any of them, and all desiring to merge their corporate rights, franchises, powers, and privileges into a new corporation, apply for letters patent, therefore, the fact that the electric current supplied, or authorized to be supplied by them severally, is, or may lawfully be, generated by different prime movers whether water, power, steam, internal fuel combustion, or other prime mover, shall not be held to render unlawful such merger and consolidation, if otherwise lawful.

HOUSE BILL NO. 1049

Providing for investigation and report upon the desirability of state subsidies for rural lines.

Section 1. Be it enacted, etc., That the Giant Power Board shall investigate and make report to the General Assembly at the opening of the Session in January, one thousand nine hundred twenty-seven, upon the desirability of the expenditure of moneys of the Commonwealth in aid of the construction of lines for the supply of electricity to the public in rural districts, and, if desirable, the method and conditions suitable for such expenditure.

Appendix V.

RURAL ELECTRIC SERVICE

In Re: Inquiry of The Public Service Commission of the Commonwealth of Pennsylvania, on its own motion, with respect to rural electric facilities and service.

COMPLAINT DOCKET NO. 6094

Adopted January 12, 1926

Effective March 1, 1926

BY THE COMMISSION:

The Commission has held hearings on the question of rules for rural electric service, whereat the electric utilities of the State of Pennsylvania, the Council of Farm Organizations, and other interested parties were represented. Evidence has been adduced from witnesses produced by the electric utilities, and by other interested parties. Various conferences have been had between the Commission, representatives of the consumers, and representatives of the utilities.

Utilities operating in the State of Pennsylvania have, in the past, employed various rules and policies under which electric line extensions were constructed to serve customers applying for service. These rules and policies varied so widely that it becomes necessary in the interest of uniformity and the elimination of discrimination in this regard, between the customers of the several utilities, to establish rules relating to line extensions which shall apply to all cases which may arise in the future where their application is appropriate.

The purpose, therefore, of the rules hereinbefore ordered is to eliminate so far as practicable all apparent discrimination in this regard, and, further, to make definite and certain the several conditions, compatible with the foregoing considerations, under which an applicant for electric service may obtain the same.

IT IS THEREFORE ORDERED: That the following order, to be known as General Order No. 27, establishing rules and regulations for rural service be, and the same is, hereby made effective as of March 1, 1926.

GENERAL ORDER NO. 27

1. *Intent.*

This order is made to facilitate the securing of electric service by farmers and others in rural territory.

2. *Definitions.*

Where used in this order singular words shall be construed as including the plural, and the following terms shall have the following meanings respectively designated for each:

"Consuming establishment" at any time means any then existing building, structure, farm, works, or other establishment of a kind such as is customarily served anywhere in the Common-

wealth with current for light heat and power or any of them, including dwellings, barns, hotels, dairies, stores, factories, mines, quarries and other like and unlike buildings, structures, words, and establishments.

“Rural area” means any part of the land area of the Commonwealth located wholly outside of the corporate limits of any city, town or borough.

“Rural consumer” means the owner, occupier or user of a consuming establishment in a rural area.

“Contracting consumer,” means a rural consumer who shall have contracted with or offered to contract with any electric company to take for one full year and pay for current to be delivered to a consuming establishment owned or operated by him in a rural area.

“Rural line” means a line of poles and of wires mounted thereon proposed or constructed for the main purpose of distributing current to one or more rural consumers.

“Point of origin” means the point where an actual rural line connects with or begins to extend from, or where a proposed rural line is to connect with or is to begin to extend from, any transmission or distribution line of any electric company, and where such rural line receives or is to receive current from such electric company.

“Measured mile” means any one of the consecutive parts of a rural line, beginning at the point of origin, each part one mile in length, except the last which shall be one mile or less in length.

“Rural distributing association” means an association or other organized body of persons for the purchase of current and the supply of the same without profit exclusively to its members or stockholders, being rural consumers.

“Electric company” means any corporation or person, which is a public service company within the definition of that term in the Public Service Company Law and which is under an obligation to supply current to the public.

“Current” means electric energy generated, transmitted and distributed, or any of them, for the supply of light, heat and power, or any of them.

A “service” means wires and other appliances of adequate capacity from the pole nearest the consumer’s building to a point on the building approved by the utility.

“Person” includes natural persons, corporations, partnerships and associations.

“Commission” means the Public Service Commission of the Commonwealth of Pennsylvania.

3. *Rural Consumers Classified*

For the purposes of this order rural consumers are divided into two classes, as follows:

Class I. Those served with current by a rural distributing association or those who demand service of current from an electric company through a rural distributing association;

Class II. Those served with, or demanding to be served with, current directly by an electric company.

4. *Standards for Construction, Operation, and Maintenance of Rural Lines.*

All rural lines shall be constructed, maintained and operated in such manner as to be reasonably adequate and practically sufficient for the accommodation and safety of its patrons, employees and the public. The Commission upon its own initiative, or upon complaint may cause any rural line to be inspected and may determine whether or not such rural line is or is not so constructed, maintained and operated. The delivery of current to, and the serving of current over any rural line found by the Commission to be not so constructed, maintained and operated is hereby prohibited. Any electric company, may, as a condition precedent to delivering current to any rural line of any rural distributing association, contract with such rural distributing associations, as to liability or indemnity for injuries to persons and property by current on or from the rural lines of such rural distributing association.

5. *Tapping of Lines.*

Every alternating current, single or multiple phase, transmission or distributing line of the parallel type of any electric company having a nominal voltage of 15,000 volts or less between the wires of one phase (neutral wire excluded) shall be considered as offering a point of origin at every point within territory chartered to such company, except as in this section hereafter provided. In the absence of other means of such electric company's delivering current to such rural consumers, such lines of such electric company shall, on the demand of any rural distributing association, or rural consumer, be there tapped by such electric company for the purpose of connection with any rural line which such electric company is by this order obligated to construct, or with any rural line of such rural distributing association. Every such transmission and distribution line of any electric company having a nominal voltage between 15,000 and 33,000 volts between the wires of one phase (neutral wire excluded) shall in like manner and upon like demand be tapped at any point for the purpose of connection with any such rural line when such rural line is considered by such electric company or found by the Commission to afford a reasonable prospect of a peak load reaching 100 K. V. A. within one year after such tapping.

PROVIDED: That upon proper cause duly shown such electric company may be relieved by the Commission from the duty of tapping at any particular point.

6. *Annual Reports of Rural Extension to Be Made.*

Every electric company and rural distributing association shall file with the Commission on or before January 31 of each year a report covering the twelve-month period ending December 31, showing—

(1) The number of miles of rural lines in operation by it at the beginning of such twelve-month period.

(2) The number of miles of rural lines constructed by it during such twelve-month period.

(3) The number of rural consumers taking service from its rural lines at the beginning and end of such twelve-month period.

(4) The number of kilowatt hours of energy consumed from such lines during the twelve-month period.

(5) The gross revenue derived from such lines during the twelve-month period.

7. *Demands for Service Apart from This Order—Amendment of This order.*

Nothing in this order shall be construed to prevent the Commission from considering upon its own merits and acting upon any demand otherwise lawful for service nor to preclude the Commission from altering, modifying, or amending this order from time to time as the Commission may deem necessary or advisable nor to preclude the Commission from relieving any electric company from the obligation herein imposed should the special circumstances of the case warrant such relief.

8. *Rate Schedules for Service to Rural Distributing Associations.*

Every electric company having rural territory within its charter territory shall on or before April 1, 1926, establish and thereafter maintain in the manner provided by law a schedule of rates for the sale of current to rural distributing associations. Electric companies shall sell current to rural distributing associations only at the rates fixed by such schedules or at other rates duly fixed by the Commission in accordance with law.

9. *Contracts for Construction, Operation and Maintenance of Lines of Rural Distributing Associations.*

Any electric company may contract with any rural distributing association for the construction, maintenance and operation, or any of them, of any or all rural lines of such rural distributing association. Copies of all such contracts shall be filed with the Commission by the electric company within two weeks after the execution thereof.

10. *Duty of Electric Company to Construct Rural Lines.*

It shall be the duty of every electric company subject to the limitations of its tapping duty fixed by Section 5 of this order, to extend its distribution system by building rural lines to serve rural consumers of Class II within its chartered territory. Each such rural line shall extend to the most distant contracting consumer who will alone or in company with other intervening contracting consumers contribute to the cost of construction of such rural line. Such contribution shall consist of such portion, if any,

of the estimated cost of such rural line, (if constructed according to but not exceeding the minimum capacity and standards of rural line construction necessary to serve said contracting consumers) as the electric company is not required to pay by Section 11 of this section.

11. Same—Demand by and Contributions from Contracting Consumers.

Upon the demand of any contracting consumer within the chartered territory of any electric company for the construction of a rural line to serve him, designating the point of origin, the electric company shall furnish to him an estimate of the cost of such construction. Upon payment to such electric company of the portion of such estimated cost, if any, as the electric company is not herein required to pay, such electric company shall construct such rural line.

The cost of each separate measured mile of such rural line from which three or more contracting consumers are to take current shall be borne by such electric company. The cost of each separate measured mile on such rural line from which less than three contracting consumers are to take current shall be borne by such electric company to the extent that such cost shall not be in excess of three hundred dollars (\$300) per contracting consumer. The electric company is not obligated to construct such line until it has received from the contracting consumers a sum equal to such excess.

12. Construction Cost.

The construction cost of any rural line uilt under this order shall include the following:

All costs of labor and materials directly chargeable to and necessary to construct a line from the designated point of origin to the consuming establishment. Such costs shall include transformers, meters and services not exceeding one hundred (100) feet in length from the pole nearest to the consumer's terminal. The line shall be of the minimum capacity and standards necessary to render reasonably adequate and safe service to the contracting consumer.

To the above may be added an item not exceeding fifteen (15) per cent of these costs to cover engineering, promotion, office supervision, clerical labor, and contingencies.

Should such electric company desire to serve the contracting consumer by a line having a point or origin different from that designated, or should it desire to construct a line having a cost greater than the cost of a line of minimum capacity and standards necessary to render reasonably adequate and safe service to the contracting consumer, the construction cost to the consumer shall not be increased thereby; but any such additional cost shall be borne by the company. In case of dispute, the estimated construction cost may be determined by the Commission.

13. *Title to Rural Lines Financed in Part by Contributions.*

No electric company shall be obligated by this order to deliver current to any rural line constructed under Sections 10 and 11 of this Order and financed in part by any advance from any rural consumer, until every consumer making any such advance shall have agreed in writing that the ownership of such rural line shall vest in such electric company. Such electric company shall be obligated to maintain and replace at its own expense all rural lines constructed under Sections 10 and 11 of this Order as public safety and convenience may require.

14. *Same—Refunds and Assessments if Estimate Be Too Large or Too Small.*

In the event that the actual construction cost of any measured mile of any rural line constructed by any electric company under this Order shall have been less than the estimate of such cost made under Sections 11 and 12 of this Order, then such company shall make refunds to all persons who shall have made advances. Such refunds to be the difference between the advances actually made and the advances that would have been sufficient had the estimated cost been the same as the actual construction cost. In the event that such actual construction cost shall have been more than such estimate such company is not required to serve until the persons who shall have made advances shall pay to such electric company the sums they would have been required to pay had the estimated cost been the same as the actual construction cost.

15. *Connection Charge for Additional Consumer.*

An additional contracting consumer shall be connected to any rural line constructed under this order upon the payment by such additional contracting consumer of a connection charge. This connection charge shall be such sum as such additional contracting consumer would have been required to pay had he been a contracting consumer at the time of the construction of the rural line from which he desires service. If the rural line was constructed partly at the expense of contracting consumers the electric company shall refund to the contributing consumers a sum equal to the difference between the payments made by them and the payments which would have been required had the additional contracting consumer been one of the original contracting consumers. Nothing in this section shall apply to connections with rural lines made more than five years after the line is constructed.

16. *Blanks for Contracting with Rural Consumers.*

Every electric company having rural territory within its chartered territory shall prepare and shall reasonably supply to all rural consumers in its chartered territory who shall desire the same, blanks suitable for signature by prospective rural consumers who by such signature and delivery thereof to such electric company and performance of all conditions agreed to by

such signature, shall become contracting consumers, said blanks to be in substantially the following form:

(Name of Electric Company)

Gentlemen:

You are hereby requested to supply electric service for an equipment of approximatelyK. W., consisting of the following:

..... installed in or upon premises located at in the Township of County, Pa., occupied as a by hereinafter known as the Consumer.

The Consumer hereby agrees to use, subject to the terms and conditions contained in the rules of the Company, lawfully established, electric service supplied by you for said equipment, for the term of one year from the date the Consumer receives written notice from the Company that service will be commenced, which term shall be continued thereafter from year year unless written notice shall be given 30 days prior to the end of the yearly term. The Consumer agrees to pay for such service at the rates and in conformity with the rules lawfully established by the Company or by The Public Service Commission.

The Consumer agrees that the electric current so furnished shall not be used except for the equipment herein scheduled without previous notice and consent of the Company.

Upon acceptance by the Company and the installation of equipment necessary to render the service herein requested, this application shall constitute a binding contract.

Accepted by:

.....
(Name of Consumer)

.....
(Consumer's address)

Date of acceptance:

17. *Limitation of Application of This Order.*

None of the provisions of this Order shall apply to any rural line containing a greater total number of measured miles than the total number of contracting consumers who shall receive service directly from such rural line. Nor shall any of its provisions apply to lines of an electric company located in territory in which the Commission in issuing its certificate of public convenience to said electric company has provided that no service should be rendered to consumers.

By order of the Commission, at Harrisburg, Pennsylvania this
12th day of January, 1926.

THE PUBLIC SERVICE COMMISSION
OF THE
COMMONWEALTH OF PENNSYLVANIA

(Signed)

Wm. D. B. AINEY,
Chairman.

ATTEST:

JNO. G. HOPWOOD,
Secretary.

(SEAL.)

Appendix VI.

Effect of Rates filed for Use on Extension made under General
Order No. 27

Monthly Bills

Extension one mile in length. Each consumer 100 K. W. H. per month
Cost of line \$2,000 per mile + \$75. for ea. cons. above 3

	3	% Gross Return	4	% Gross Return	5	% Gross Return	5-½% Return	6	% Gross Return
Pennsylvania Power & Light Co.	\$11.55	21.6	\$9.10	21.1	\$9.00	25.1	\$9.00	27.1	\$9.00
Penn Public Service Company	14.36	25.8	11.34	26.3	10.21	28.5	9.80	29.5	9.49
Counties Gas and Electric Co.	15.40	27.7	13.65	31.6	12.60	35.1	12.22	36.8	11.90
Delta Electric Power Co.	18.80	33.8	16.60	38.5	15.28	42.7	14.80	44.6	14.40
Philadelphia Suburban Gas & Electric Co.	14.40	25.9	12.65	29.3	11.60	32.4	11.22	33.8	10.90
Philadelphia Suburban (Bristol & Ambler)	16.12	29.0	14.37	33.3	13.22	36.9	12.94	39.0	12.62
Philadelphia Suburban (Pottstown)	11.55	21.6	10.00	23.2	10.00	27.9	10.00	30.1	10.00
Scranton Electric Company	11.55	21.6	9.10	21.1	8.50	23.7	8.50	25.6	8.50
United Electric Co. Lemoyne	11.55	21.6	9.10	21.1	7.63	21.3	7.09	21.4	6.65
Harrisburg Light and Power Co.	11.55	21.6	9.10	21.1	8.80	24.5	8.80	26.5	8.80
Humdstown Water and Power Co.	11.55	21.6	10.00	23.2	10.00	27.9	10.00	30.1	10.00
Edison Electric Co. Lancaster (Newmanstown & Hopeland)	11.55	21.6	11.00	25.5	11.00	30.7	11.00	33.1	11.00
Edison Electric Co. East Earl etc.	11.55	21.6	9.10	21.1	9.00	25.1	9.00	27.1	9.00
Edison Electric Co. Robesonia etc.	11.55	21.6	10.50	24.3	10.50	30.7	10.50	31.6	10.50
Wrightsville Light & Power Co.	11.55	21.6	10.00	23.2	10.00	27.9	10.00	30.1	10.00
Intercounty Electric Co.	10.00	18.0	7.50	17.4	6.00	16.7	5.45	16.4	5.00
Philadelphia Electric Co.	11.11	20.0	8.65	20.0	7.17	20.0	6.63	20.0	6.25
Delaware County Electric Co.	18.45	33.2	16.25	37.7	14.93	41.7	14.45	43.5	14.05
Duquesne Light Co.	14.50	26.1	12.30	28.5	10.98	31.7	10.50	31.6	10.10
Mercer County Light, Heat and Power Co.	15.65	28.2	13.23	30.7	11.78	32.9	11.25	33.9	10.81
(Subsidiary Pennsylvania & Ohio Lt. Co.)									
Big Beaver Township, Beaver Lt. & Pr. Co.)									
(Subsidiary Pennsylvania & Ohio Lt. Co.)									
Allegheny Valley Light Co.									
(Subsidiary West Penn & Keystone Power Corp)									
Average	13.06	23.9%	11.00	25.5	10.20	28.7	9.93	29.9	9.71

Grand Average—27.9%

The above results are based on an assumed cost of \$2000 per mile for an extension serving 3 consumers per mile, with \$75 added for each consumer above three.

The former practice in regard to distribution of the cost of an extension as between the utility and its rural consumers was so various, even in the dealings of a single company that we have found it practically impossible to estimate monthly bills for like service before the issue of General Order No. 27.

The above calculations are based on regular schedules for residence lighting including small appliances.

¹From a mimeographed report by the Bureau of Engineering of the Public Service Commission to Commissioners Stewart and Martin dated May 24, 1926, Appendix p. 118.

Appendix VII.

Conowingo Regulation—Correspondence of Governor Pinchot with the Federal Power Commission February 13 March 8, 1926.

The Federal Power Commission,
Washington, D. C.

Sirs:

In the matter of the application of the Philadelphia Electric Power Company, a public utility corporation chartered by the Commonwealth of Pennsylvania, for authority to issue certain bonds and stock to finance the Conowingo Project which is to be constructed under license issued by you:-

Because the Pennsylvania Public Service Company Law does not empower our Public Service Commission to regulate the issue of securities the only protection of our people in this case is the power given your Commission to regulate security issues for financing projects licensed by you whenever the State Commission concerned is not authorized to do so.

Mr. Wells had been instructed to represent this Commonwealth at the hearing in Baltimore on February 12th before your Executive Secretary, but urgent public business required his presence here. In pursuance of his telegram of February 11th I write this letter to make the suggestions that seem appropriate, namely:

1. That you refuse authority to issue stock in excess of the amount which, added to the proceeds of the bonds authorized by you, will equal the net investment in the project.
2. That you refuse authority to issue any no-par common or other stock, but on the contrary, that you require all stock to have a fixed par expressed in the stock certificates.
3. That you refuse authority to issue any non-voting preferred or other stock.

(1) The Federal Water Power Act requires you to ascertain and fix the "net investment" in project (defined as the actual original cost thereof), and, by contract expressed in the Federal license, the company binds itself to accept this actual cost as the basis upon which its "fair return" is to be computed in the process of rate-regulation, by our Public Service Commission. Thus the uncertain, unstable, wasteful and contentious procedure of valuation, commonly used in rate making, will be avoided in state regulation of rates charged by licensees under the Federal Water Power Act. This being so, it follows that the security issues at par should be equivalent to the "net investment" rate-base (the actual amount of money properly invested). The proposed bond issue (\$38,000,000 at 5½%) with the proposed issue at par of \$16,000,000 of preferred stock will provide \$54,000,000.—enough to pay the estimated cost of the project. The additional 94,200 shares of common stock whose issue you are asked to authorize can serve no purpose but that very speculation in unearned increment which the Federal Water Power Act was intended to prevent.

(2) The principle that the par of security issues should approximately equal the net investment bars the issue of stock without par value. My second suggestion therefore is that you require all stock to have a fixed par value expressed in the certificate.

(3) The vice of non-voting stock was pointed out last December by the address of Professor William Z. Ripley at a meeting of the Academy of Political Science in the City of New York (Proceedings Vol. XI, No. 4, p. 695) and by Mr. Wells in his address at the same meeting on "Public Regulation of the Holding Company in Public Utilities" (same publication, page 156). Professor Ripley has more recently given wider currency to his views by his article "From Main Street to Wall Street" in the Atlantic Monthly for January. The strength of private ownership and operation of public utilities as a public policy lies in the union of investment risk and control in the same hands. But under the financing plan proposed to you by the applicants all the control will ultimately be in the hands of the holders of common stock who will not have invested a dollar, and all the investment will have been made by the holders of the bonds and preferred stock who will have no voice in the management. My final suggestion therefore is that you refuse to authorize the issue of any non-voting stock for this project.

Very sincerely yours,

GIFFORD PINCHOT.

*Harrisburg, Pa.
February 13, 1926.*

Hon. Gifford Pinchot,
Governor, Commonwealth of Pennsylvania,
Harrisburg, Pennsylvania.

My dear Governor:

I have your letter of February 13, addressed to the Federal Power Commission, making certain suggestions with respect to the proposals of Philadelphia Electric Power Company for issuance of securities to finance the Conowingo project.

I am inclosing you copy of the report and recommendation on the application to issue securities and the order of the Commission which was issued today. You will see by an examination of the report and recommendations, particularly that portion beginning with page 13, that we found defects in the proposed financial plan in addition to those to which attention was called in your letter. I will not discuss these defects further than to refer you to the portion of the report headed "Conclusions and Recommendations."

You will note from an examination of the order that the Commission has not authorized the issuance of any securities beyond the amount recognized as actual legitimate investment in the project. The approval of the issuance to The Philadelphia Electric Company of the present authorized common stock issue of 500 shares of Philadelphia Electric Power Company as compensation for services rendered and to be rendered by the Philadelphia Electric Company, such stock authorized having a par value of \$50,000 and the value of such services to be entered in the fixed capital accounts as \$50,000 appears

a very reasonable compensation for what The Philadelphia Electric Company has done in developing this project and assuming the liability of par issue of all preferred and common stock. You will note that all stocks authorized to be issued in excess of these 500 shares are to be issued only for cash at par.

You will also note that authority was refused to issue any non-par stock.

With reference to the lack of voting power in the preferred stock: I would call attention to the peculiar circumstances of this case, under which a lack of voting power in the preferred is not likely in any material degree to separate ownership from management. The Conowingo project has been worked up by The Philadelphia Electric Company. This company has assumed primary responsibility for its financing and this company will receive such benefits as may accrue from the development. It seemed, therefore, desirable, both to this Commission and to the two State Commissions, that the control of the Conowingo project should rest in the hands of the corporation responsible for its construction and operation. It is further required, as you will note from the terms of the order, that the entire common stock issue of Philadelphia Electric Power Company be held as a treasury asset of The Philadelphia Electric Company and that the latter company shall not have authority to sell any such stock or to pledge more than 49 per cent of it, except in connection with a general mortgage covering the entire physical plant of The Philadelphia Electric Company. The Conowingo project will, therefore, be controlled by the voting stockholders of The Philadelphia Electric Company. It is the plan of The Philadelphia Electric Company, which is responsible for the disposition of the preferred stock, to offer such stock pro rata to its own stockholders. There appears little doubt that the entire issue, or the greater part of it at least, will be taken by present stock holders of The Philadelphia Electric Company. If so, ownership and management of the Conowingo project will rest in the same hands, that is, in the stockholders of The Philadelphia Electric Company. Of course, such stockholders may part from time to time with some of their preferred stock holdings, but under the peculiar circumstances of this case it would seem very undesirable that the management of the Conowingo project, which is in all essential particulars a mere extension of the system of The Philadelphia Electric Company, should pass out of the hands of that corporation through sale of the preferred stock, something that might be possible if the preferred stock had independent voting rights. The extent of distribution of this combined ownership and management is indicated from the fact that there are nearly 24,000 individual stockholders of The Philadelphia Electric Company and that well over one-half of the total outstanding stock is held in blocks of less than 1,000 shares. Furthermore, all of the outstanding stock of The Philadelphia Electric Company is voting stock.

The requirements in the Commission's order limiting the issue of preferred stock to one-third of the par value of bonds issued will require an issue of common stock varying from about \$1,700,000 if the project is built for \$48,000,000 to approximately \$3,400,000 if the project costs the estimated figure \$52,200,000. While this amount is of course a small portion of the total cost of the project it is, nevertheless, a substantial contribution in view of the fact that none of

this stock can be offered for subscription but must be paid for out of the surplus of The Philadelphia Electric Company or through the issuance of its own securities to raise the necessary funds.

We have given this feature of the Conowingo project, as well as all others, very careful consideration, and we believe that the action taken in connection with security issues has improved the financial set up not only from the standpoint of public interest but also from the standpoint of the corporation itself to the extent at least that it has provided a margin of protection for the bonds and preferred stock which did not exist in the plan presented by the applicant.

Very truly yours,

(Signed) O. C. MERRILL,

Executive Secretary.

*Washington D. C.
February 27, 1926,*

March 8, 1926.

Hon. O. C. Merrill, Executive Secretary
Federal Power Commission,
Washington, D. C.

My dear Mr. Merrill:

Many thanks for your letter of February 27, AL—Md.—Pa.—No. 405 Susquehanna Power Company et al.

The action of the Federal Power Commission in limiting the total par of securities authorized to be issued to the amount of the net investment that will be made in the construction of the project, and in refusing to sanction the issuance of any no-par stock, marks a great forward step in public utility regulation for Pennsylvania. I note with satisfaction that the Commission seems to approve the principle that voting power and the major investors risk should not be separated, although under the peculiar circumstances of this case they believe the principle to be sufficiently safeguarded without giving voting power to the preferred stock.

Very sincerely yours,

GIFFORD PINCHOT.

Appendix VIII.

APPRECIATION OF COMMON STOCKS OF HOLDING COMPANIES CONTROLLING ELECTRIC UTILITIES IN PENNSYLVANIA

TEN HOLDING COMPANIES

AND

THE ELECTRIC UTILITIES THEY CONTROL IN PENNSYLVANIA

1. AMERICAN GAS COMPANY. (Incorporated in New Jersey)
 - A. Luzerne County Gas & Electric Corp.
 - B. Philadelphia Suburban Gas & Electric Co.
 - C. Langhorne Electric Light & Power Co.
 - D. New Hope Electric Company.
2. AMERICAN GAS & ELECTRIC CO. (Incorporated in New York)
 - A. American Electric Power Co.
 - (1) Chester County Light & Power Co.
 - B. Scranton Electric Co.
3. AMERICAN WATER WORKS & ELECTRIC CO. INC. (Incorporated in Virginia)
 - A. West Penn Electric Co.
 - (1) West Penn Co.
 - a. West Penn Railways Co.
 - b. West Penn Power Co.
 - (2) Keystone Power & Light Co.
 - A. Keystone Power Corp.
 - (3) Potomac Edison Co.
4. GENERAL GAS & ELECTRIC CORP. (Incorporated in Maine)
 - A. Metropolitan Edison Co.
 - (1) Pennsylvania Edison Co.
 - B. Sayre Electric Co.
 - C. Susquehanna County Light & Power Co.
 - D. North Penn Power Co.
5. LEHIGH POWER SECURITIES CORP. (Incorporated in Delaware)
 - A. Pennsylvania Power & Light Co.
 - B. Lehigh Valley Transit Co.
6. PHILADELPHIA CO. (Incorporated in Pennsylvania)
 - A. Duquesne Light Co.
7. PHILADELPHIA ELECTRIC CO. (Incorporated in Pennsylvania)
 - A. Susquehanna Power Co.

8. **REPUBLIC RAILWAY & LIGHT CO.** (Incorporated in New Jersey)
 A. Penn-Ohio Edison Co.
 (1) Pennsylvania-Ohio Power & Light Co.
 a. Pennsylvania Power Co.
 b. Shenango Valley Electric Light Co.
 (2) Zelienople Light & Power Co.
9. **UNITED GAS & ELECTRIC CORP.** (Incorporated in Connecticut)
 A. Harrisburg Light & Power Co.
 B. Lancaster County Railway & Light Co.
 C. Berkshire Electric Co.
10. **UNITED GAS IMPROVEMENT CO.**
 A. American Gas Co. (See above)
 B. Counties Gas & Electric Co.

APPRECIATION OF THE COMMON STOCKS
 OF
 TEN HOLDING COMPANIES HAVING SUBSIDIARIES
 OPERATING IN PENNSYLVANIA¹

TABLE I

"High" Quotations of ten Holding Companies, after
 making allowance for split stocks.¹

	1920	1921	1922	1923	1924	1925
American Gas Co.,	50½	42	79¾	83¾	126	98½
Amer. Gas & Electric Co.,	125¾	122	181½	230⅝a	566¼a	397½a
Amer. Water Works & Elec. Co.,	3½	6½	27¾	42	127½	340⅝b
Gen. Gas & Elec. Corp.,	5½	2	3½	14¾	61	288c
Lehigh Pwr. Sec. Corp.,	7	8½	18¾	25¼	88	186½
Philadelphia Company,	40½	35¼	44⅞	47⅞	51⅞	60½
Philadelphia Electric Co.,	25¼	22⅞	31¾	32⅞	39	49⅞
Electric Co.,	125¾	122	181½	230⅝a	566¼a	397½a
Republ. Ry. & Light Co.,	17¾	7	18¼	17½	48	67½

a) After allowing for a 5-to-1 split, May, 1923.

b) After allowing for a 5-to-1 split, Nov., 1924.

c) After allowing for a 4-to-1 split, Oct., 1925.

¹ Compiled from the monthly Bank & Quotation Supplement of The Commercial & Financial Chronicle.

	1920	1921	1922	1923	1924	1925
United Gas & Elec. Corp.,	1 (Sale)	1	4	11½	35½	55
United Gas Improvement Company.	54¼	39¾	54¼	58¾	81½	117½

TEN HOLDING COMPANIES

AND

THE ELECTRIC UTILITIES THEY CONTROL IN PENNSYLVANIA

APPRECIATION IN DOLLARS AND IN PER CENT OF INCREASE OVER 1920 HIGH¹

	A. Market Value at 1920 High	B1. Appreciated Market Value of A. at 1925 High	C1. Total Market Value (Including shares sold, etc.) at 1925 High	B2. Net Appre- ciation	C2. Gross Appre- ciation.
Amer. Gas. Co.	\$ 3,920,050.00	\$ 10,548,562.00	\$ 13,709,180.75	169.0%	249.7%
Amer. Gas & El. Co.	13,653,772.50	80,754,563.25	98,259,297.00	491.4%	619.6%
Amer. W. W. & El. Co.	322,000.00	33,210,937.50	39,342,187.50	10,213.9%	12,118.8%
Gen. Gas & El. Co.	248,347.00	9,335,714.00	9,355,078.00	3,659.1%	3,666.9%
Lehigh Pw. Sec. Corp.	2,135,000.00	56,882,500.00	57,902,992.50	2,564.2%	2,611.8%
Phila. Company	34,569,115.00	51,961,030.00	56,196,030.00	50.3%	62.6%
Phila. Elec. Co.	29,914,760.75	58,200,500.00	125,151,836.25	94.6%	318.4%
Repub. Ry. & Lt. Co.	1,101,575.50	3,909,780.00	3,909,906.00	254.9%	254.9%
United Gas & El. Co.	122,508.00	2,245,980.00	17,075,520.00	1,733.3%	13,838.2%
United Gas Im- prov. Co.	66,217,233.00	143,420,030.00	172,412,450.00	116.6%	160.37%
Totals	\$152,204,361.75	\$450,469,596.75	\$593,314,478.00	Average	Appreciation
Total Net Appreciation				NET	GROSS
Total Gross Appreciation				195.96%	289.81%

¹Column "A" shows the Total Market Value of the shares outstanding in 1920 at the high quotation of that year.

Column "B1" shows the Total Market Value of those same shares, plus any shares accruing through stock dividends or split-ups, at the high quotation of 1925.

Column "C1" shows the Total Market Value of all the shares outstanding in 1925 at the 1925 high quotation.

Column "B2" shows the percentage relation of the increase of Column B1 over Column A to Column A.

Column "C2" shows the percentage relation of the increase of Column C1 over Column A to Column A.

Appendix IX

REPORT ON STUDY OF RATE SPREAD FOR ELECTRIC
SERVICE BY PUBLIC UTILITIES IN PENNSYLVANIA

BY O. M. RAU

Public Service Commission
Engineering Bureau

February 1926

Section 1. Report¹

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INTRODUCTION

The theory that the Electric Power Utilities are supplying a "service" not a commodity, has resulted in developinbg a system of classified rate schedules based on what the "traffic will bear" in place of arriving at the sale price from costs.

When the use of electricity was largely confined to lighting as a substitute for gas and considered a luxury its sale was largely a "service."

The universal application of electricity to the daily pursuits of men, whether in the humblest home or the largest factory spreading its use over the 24 hours of a day, does not allow of any distinction by classes for the use of the commodity, nor is it accompanied by any so called service.

The commodity offered by an electric utility is "power." Its use is spread over the entire day similarly by all users and therefore

¹ For statistical data (See Section 2).

cannot consistently be classified by arbitrarily assigning a user to a class dependent on his pursuits.

With the universal application of electric power, there also developed a general knowledge of its use which largely eliminated individual attention to all consumers, so that the power delivered to a large or small user calls for the same service which is analogous to the service furnished by water or gas utilities.

On these premises this study was undertaken to ascertain the reasonableness of the spread in electric power rates ranging in special cases from less than one cent per K.W.H. to large consumers to over ten cents per K.W.H. to small users, sold under schedules with a maximum price of 25 cents and a minimum price of 7 mills per K.W.H.

QUESTIONNAIRE

To obtain authentic information as a basis for this study, a questionnaire was prepared relating to the cost of service for each class of consumers as covered by the rate schedules of each company. (See appendix pages 107-8-9) for the year 1924.

Replies were received as follows:

Class per P. S. C. Classification	Operating Utilities as listed by the Pub. Serv. Commission	No.	No. of replies Re- ceived	Co's, having no local service excused from replying	No. not replying	% of Total Incl. in Report
A & B	-----	84	74	7	3	96%
C.	-----	88	76	8	4	96%
D.	-----	55	38	8	9	84%
Total	-----	227	188	23	16	93%

The companies replying sold 98% of the total electric power used in the state during 1924. (See appendix page 12)².

The data from the questionnaires were tabulated as to its importance to this study for which purpose the companies were divided into two groups:—A includes all companies with gross earnings of less than \$25,000 per year; B, companies with gross earnings of \$25,000 or more per year.

These groups are subdivided into two classes each; Group A-1, receiving a net average of 10 cents or more per K.W.H. sold, and group A-2 receiving a net average of less than 10 cents per K.W.H. sold. (See appendix, pages 3 and 4). Group B-1 includes all companies controlled or affiliated so that the management of more than one utility is in the control of the same organization. Group B-2 consists of local companies. (See appendix pages 5 to 10 inclusive).

RATE SCHEDULES

An analysis of the rate schedules and the data pertaining to earnings under each schedule is tabulated by the following classification.

² These page references are to the MS. pages of Section 2

Residence or Domestic Lighting	(Appendix pages 14 to 26)
Domestic Power, Cooking and Heating	(Appendix pages 27 to 31)
Commercial Light and Power	(Appendix pages 32 to 38)
General Power	(Appendix pages 39 to 53)
Wholesale Power—Primary and Secondary	(Appendix pages 54 to 56)
Wholesale Power—Primary	(Appendix pages 57 to 59)
Special Power Contracts	(Appendix pages 60 to 63)
Flat Rate Service	(Appendix pages 73 to 77)
Interchange Power	(Appendix pages 64)
Off Peak or Restricted Power	(Appendix pages 65 to 67)
Miscellaneous Schedules	(Appendix pages 68 to 72)

ENERGY LOSSES

The data pertaining to losses (Question 7) are tabulated as they effect the schedules in the above classification, as accurately as the information furnished would permit. (Appendix Pages 86 to 91). The difficulty of accurately accounting for losses is expressed in the replies from the larger companies, of which the following abstract is typical. (Also see Appendix Pages 92 to 94).

Luzerne County Gas and Electric Corporation

"It is not possible to determine precisely the loss incurred in delivering energy to each class of consumer, for the reason that it is the usual practice to connect various classes to one transmission line, distribution circuit, transformer bank, ect., wherever it is possible to render good service to all by following this procedure. In such cases the losses are joint and it is obviously impossible to differentiate. In many instances the load of one class of customer will predominate on a circuit which serves other classes incidentally. In still other cases a circuit serves only one class of customer. These percentages of loss therefore have been determined by testing typical circuits, by process of elimination and through recourse to computation, estimate and the exercise of a judgment born of of experience."

"As set forth above, therefore, they represent a composite of each of the methods enumerated and it is believed are sufficiently accurate to serve every practical requirement."

COST TO SERVE

The most important data desired (Question 8) was either entirely omitted or disappointing for the purpose of this study, with the exception that the replies received fully endorses the position taken in authorizing this study, that "Rate Schedules are not based on Costs."

The following abstract expresses the general conclusion in the replies received. (Also see Appendix pages 94 to 105).

Metropolitan Edison Company

"No records are kept summarizing all of the elements of cost which properly enter into the total cost of service as rendered under any particular rate schedule, and any attempt to show such total costs would be only the result of accounting and engineering deductions."

Load Curves (Question 10) were received from the principal companies generating power and are tabulated in detail. (See Appendix pages 81 and 82.)

SUMMARIES

Before entering upon an analysis of the Rate Schedules, a general review of the summaries from the data contained in the questionnaire is submitted as the basis on which the conclusions of this study are arrived at.

In Group A-1, the 29 companies reporting receive a net average of 11.9c per K.W.H. sold, supply 6,343 consumers, using 1,810,000 K.W.H. of energy. Including an estimate for the six companies not reporting increases the total to 7,302 consumers using approximately two million K.W.H. of energy, paying an average of 12c per K.W.H.

In Group A-2, the 27 companies reporting receive a net average of 7.3c per K.W.H. sold, supply 6,504 consumers using 3,935,000 K.W.H. of energy. Including an estimate for the six companies not reporting, increases the total to 7,307 consumers, using approximately 4 $\frac{1}{4}$ million K.W.H. of energy, paying an average of 8c per K.W.H.

Group B-1 (controlled companies) supply a total of 1,226,541 consumers, using a 4,993,583,000 K.W.H. of energy, paying an average of 2.44 cents per K.W.H.

Group B-2, large local companies supply 58,167 consumers using 101,722,000 K.W.H. of energy, paying an average of 3.5c per K.W.H. Including an estimate for five companies not reporting, increases the total to 79,218 consumers using approximately 160 million K.W.H. of energy, paying an average of 3 $\frac{1}{2}$ cents per K.W.H.

The total for all companies in the state being 1,320,368 consumers using 5.2 billion K.W.H., paying an average of 2.45 cents per K.W.H.

The power is sold to consumers at rates as filed with the Public Service Commission. A recent investigation made by Mr. Morse of the Engineering Bureau indicates that there are 1,396 rate schedules for electric service filed with the Bureau of Rates & Tariffs. of this number 1104 are listed in this report under which power is reported to have been sold during 1924. Of these 1104 schedules 125 are similar, leaving a total of 1079 different schedules under which power was purchased by the consumers (See Appendix Page 79).

CLASSIFICATION OF RATES

The classification of rate schedules referred to heretofore the subdivided as to form as follows: (Appendix Pages 14 to 26).

Single Step Rates.

Block Rates having two or more steps.

Demand Rates.

Rates based on number of rooms.
 Rates based on number of outlets.
 Rates based on hours use of installation.
 Rates having a fixed service charge.

DOMESTIC RATES

Domestic service was furnished to 93,548 consumers under single step rate varying from 15 c to 3.8c per K.W.H. consuming approximately 25 million K.W.H. for which an average price of 10.4c was paid, and 41,145 consumers under single step rates varying from 10c to 4 c consuming 15½ million K.W.H. for which an average price of 7.2c was paid.

Block rates were applied to 215,292 consumers under rates varying from 20c to 2.5c per K.W.H. consuming 62 million K.W.H. at an average price of 11.4c, and 361,759 consumers under rates varying from 18c to 2c, consuming 140 million K.W.H., at an average price of 8.6 cents per K.W.H.

Rates based on the number of rooms were used by 105,924 consumers, consuming 44¼ million K. W. H., at an average price of 6.5 cents.

Demand rates by 17,444 consumers using 8 million K.W.H., at an average price of 7.1 cents.

Rates based on hours use of installation by 22,149 consumers using 6.6 million K.W.H. at an average price of 10.6c and 26,277 consumers using 9.6 million K.W.H. at an average price of 7.5 cents.

Rates having a fixed service charge were used by 13,700 consumers using 3.72 million K.W.H. at an average price of 11½ cents, and 10,115 consumers using 790,000 K.W.H. at an average price of 7.4 cents.

The domestic consumption per consumer under the various rates range from a minimum of 128 KW.H. per year for which an average price of 18.5 cents was paid to 1,310 K.W.H. at an average price of 5.1c. The consumption of all domestic consumers was 395,674,000 K.W.H. for the year, for which an average price of 8.4 cents was paid (See Appendix Page 26).

Tabulating the consumption per domestic consumer by class of rates, the following results are noted:

Rate Class	Maximum		Minimum		Averages		Averages	
	Price	Use KWH	Price	Use KWH.	Price	KWH. Above 10 Cts.	Price Below 10 Cts.	KWH.
Single Step	16.8	172	5.2	520	10.4	270	7.2	389
Block Rates	24.5	235	5.5	480	11.	375	7.4	281
Room Bases	7.1	325	5.4	670	...	...	6.5	420
Demand	9.2	270	7.	475	...	...	6.6	460
Mis. Use	10.8	300	7.3	385	11.2	270	5.6	510
Service Charges	16.	260	7.	475	11.	300	7.4	780

DOMESTIC COOKING RATES

Service under cooking, heating and refrigerating rates, (see Appendix, pages 26 to 31) was furnished to 584 consumers under single step rates varying from 8c to 2.7 cents per K.W.H., consuming approximately 852,000 K. W. H., for which an average price of 4.6 cents was paid. Block rates were applied to 1,676 consumers under rates varying from 12.6 cents to 3 cents per K.W.H., consuming 2,617,500 K.W.H., at an average price of 3.75 cents per K.W.H. Demand rates were applied to 95 consumers, using 109,000 K.W.H., at an average price of 4.6 cents per K.W.H. Rates based on hours use of installation were applied to 19 consumers using 22,500 K W. H., at an average price of 3.75 cents per K.W.H.

The average consumption per consumer obtaining service under cooking, heating and refrigerating rates, was 1,100 K. W. H., at an average price of 4c per K.W.H.

COMMERCIAL POWER AND LIGHTING RATES

Commercial service (see Appendix 32 to 38) or schedules including both power and light was furnished to 7,088 consumers under single step rates varying from 11 cents to 5 cents per K.W.H., consuming 9,890,000 K.W.H. for which an average price of 7c was paid.

Block rates were applied to 40,594 consumers varying from 13.3 cents to 2.3 cents consuming 48,727,500 K.W.H. at an average price of 7c per K.W.H.

Rates based on hours use of installation were applied to 102,504 consumers using 231,952,500 K.W.H., at an average price of 4.85 cents per K.W.H.

Demand Rates were used by 21,513 consumers using 42,116,000 K.W.H., at an average price of 6c per K.W.H.

Rates based on the numebr of outlets were used by 13,688 consumers using 17,85200 K.W.H., at an average price of 7.6 cents per K.W.H.

The average consumption per soncumer obtaining service under and power rates was 1,850 K.W.H., at an average price of 5.5 cents per K.W.H.

GENERAL POWER RATES

Service under general power schedules (See Appendix pages 39 to 53) was furnished to 2,312 consumers under single step rates averaging over 4 cents per K.W.H., using 3,490,000 K.W.H. The rates varying from 12 cents to 4 cents per K.W.H. The average price paid was 5.5 cents per K.W.H. 390 consumers were served under single step rates averaging less than 4 cents per K.W.H., using 10,345,500 K.W.H. The rates varying from 5 cents to 2.5 cents; the average price paid was 3.05 cents per K.W.H.

Block rates averaging over 4c per K.W.H. were used by 5,947 consumers using 23,816,500 K.W.H. These rates varied from 14.3 cents to 1.9 cents. The average price paid was 5.5 cents. 1,440 consumers were served under rates averaging less than 4c per K.W.H. using 26,839,000 K.W.H. These rates varied from 12 cents to 1.3 cents per K.W.H. The average price paid was 3.5 cents.

Rates based on hours use of installation were used by 21,367 consumers using 44,165,500 K.W.H. under rates averaging over 4 cents per K.W.H. The average price paid was 6.4 cents. 3,069 consumers using 575,979,000 K.W.H. under rates averaging less than 4 cents per K.W.H. paid an average of 1.6 cents per K.W.H.

Miscellaneous power rates having special provision and not coming within the above classification were applied to 3,574 consumers, using 11,052,000 K.W.H. at rates averaging over 4 cents per K.W.H. The average price paid was 5.1 cents per K.W.H. 2,140 consumers using 120,464,000 K.W.H. were served at rates averaging less than 4 cents per K.W.H., for which the average price paid was 3.35 cents per K.W.H.

The average consumption per consumer obtaining service under general power schedules averaging 4 cents or over per K.W.H. was 2,850 K.W.H. at an average price of 5.5 cents. Under schedules averaging less than 4 cents per K.W.H. the consumption per consumer was 130,000 K.W.H. at an average price of 1.9 cents per K.W.H.

WHOLESALE POWER RATES

Wholesale power (see Appendix pages 54 to 63) including both primary and secondary service was furnished to 3,013 consumers using 841,594,000 K.W.H. at an average price of 1.75 cents per K.W.H. Wholesale power specified as primary power was furnished to 9,574 consumers using 681,464,000 K.W.H. at an average price of 1.54 cents per K.W.H.

Schedules specified for railroad and electric railway power were used by 96 consumers consuming 728,685,000 K.W.H. at an average price of 9.7 mills per K.W.H. Power supplied to electric utilities for resale was sold to 93 consumers using 259,279,000 K.W.H. at an average price of 1.2 cents per K.W.H. Special schedules applying to specific industries or uses such as steel mills, pumping plants, cement plants, etc., were used by 50 consumers consuming 152,184,000 K.W.H. at an average price of 1.3 cents.

The total consumption of power under wholesale power schedules was 2,660,206,000 K. W. H., supplied to 12,826 consumers, at an average price of 1.35 cents per K.W.H.

OFF PEAK & INTERCHANGE POWER

Off Peak power (see Appendix pages 65, 66 and 67) is supplied to 146 consumers using 126,414,000 K.W.H. at an average price of 9.8 mills. Interchange power (see Appendix pages 64 and 67) is supplied to 14 consumers using 106,949,000 K.W.H. at an average price of 9 mills per K.W.H.

SPECIAL RATES

Service supplied under regular schedules to which a special concession is added (see Appendix pages 68 to 72) and applied to employes, charitable institutions, hospitals, churches, etc., were used by 8,994 consumers, using 20,379,700 K.W.H. at an average price of 4.5 cents per K.W.H.

It is interesting to note that of the 3,068 employes obtaining special rates, the average consumption was 385 K.W.H. per consumer, and the average price was 4.7 cents per K.W.H.

FLAT RATES

Flat rates (see Appendix pages 73 to 77) are confined principally to commercial display lighting such as signs, show windows, etc., and municipal street lights.

Schedules applied to display lighting were used by 2,169 consumers, using 4,153,000 K.W.H. at an average price of 5.6 cents per K.W.H.

Schedules applied to street lighting were used by 1,210 consumers using 124,639,000 K.W.H. at an average price of 3.4 cents.

Miscellaneous flat rates were applied to 1,745 consumers using 667,000 K.W.H. at an average price of 5.2 cents.

SUMMARY OF RATE SCHEDULES

Analyzing the foregoing summaries, the following conclusions are obtained:

Earnings from operation of one group of 29 small companies (Group A-1) average from 10 cents to 22 cents per K.W.H. The total earnings of these 29 companies was an average of 11.9 cents per K.W.H.

Earnings of a second group of 27 small companies (Group A-2) averaged from 4.5 cents to 9.4 cents per K.W.H. The total earnings of these 27 companies was an average of 7.3 cents per K.W.H.

These 56 companies are representative of the small utilities still in operation and in most instances furnish service to rural districts or small villages, the service being generally used for domestic purposes.

The earnings of a group of 33 large companies (Group B-2) not affiliated and of a local character both as to ownership and service, average from 1.7 cents to 10.9 cents per K.W.H. The total earnings of these 33 companies averaged 3.5 cents per K.W.H.

The earnings of companies controlled or affiliated averaged for each controlled group from 1.26 cents to 8.2 cents per K.W.H. The total earnings of all the companies in this group averaged 2.44 cents per K.W.H.

The average earnings for domestic service of all companies is 7.6 cents per K.W.H. varying in average earnings under different schedules from 5.1 cents to 24.5 cents per K.W.H.

Of the 132 domestic schedules listed the average earnings of 36 are below 9 cents per K.W.H. and at these schedules 670,023 consumers are served, all other domestic consumers (389,713) being served at the remaining 96 schedules paying 9 cents or more per K.W.H.

The small companies (Group A) being limited to practically a domestic service represent in a measure, the maximum costs to furnish electric service. These companies as a rule furnish service in districts with a low density of consumers, are inefficient as to the production of power and are not conducted with the economies possibly by the larger companies.

The 56 small companies (Group A) replying to the questionnaire indicate that the rate at which service is furnished appears to earn a fair return on the capital invested with an average earning of 8.6 cents per K.W.H.

This indicates that the maximum price or the high rate in the schedules for domestic service should not exceed 9 cents per K.W.H. and rapidly scale downward where this service is supplied from efficient plants by economically operated organizations.

The schedules covering the larger power users present complicated problems, and cannot be analyzed from the data available, due principally to wide fluctuation in use by individual consumers.

A general summary of large power schedules follows:

	No. of Con- sumers	1000 KWH. Sold	Net Amt. Paid	Average Amt. Paid Per KWH.
Single Step Rates	44	15,313	\$268,863	1.75
Block Rates	446	23,382	871,839	3.7
Demand Rate	3,110	1,462,176	23,817,689	1.62
Hours Use Rate	55	14,409	158,806	1.1
Misc. Power	71	8,027	182,114	2.25
Railway Power	96	728,685	7,009,069	.97
Resale Power	93	256,279	3,073,070	1.2
Special Contracts	50	152,184	1,997,815	1.3
Interchange Power	14	106,949	975,152	.9
Off Peak Power	146	126,414	1,236,897	.98
	4,125	2,893,818	\$39,591,314	1.35

The total energy sold under these schedules during 1924 was approximately 3 billion K.W.H. used by 4,125 consumers or approximately 700,000 K.W.H. per consumer at an average price of 1.35 cents per K.W.H.

General summary of Domestic Schedule is as follows:

Rates	No. of Consumers	1000 KWH. Sold	Average Paid per K.W.H. cents
Single Step Rates (a)	93,548	25,000	10.4
Single Step Rates (b)	41,145	15,500	7.2
Block Rates (a)	215,292	62,000	11.4
Block Rates (b)	367,759	140,000	3.6
Room Bases Rate	105,924	44,250	6.5
Demand Rate	17,444	8,000	7.1
Hours Use Rate (a)	22,149	6,600	10.6
Hours Use Rate (b)	26,277	9,600	7.5
Service Charge Rate (a)	13,700	3,720	11.5
Service Charge Rate (b)	10,115	790	7.4
Miscellaneous Rates	145,777	79,112	6.8
Total and Average	1,053,130	393,572	8.3

The wholesale power sales were approximately 58 percent of the total K.W.H. sold by all companies tabulated and approximately 33

percent of the earnings from the sale of all electric service. Comparing the schedules from which the average maximum earnings per K.W.H. were obtained, namely, sales from domestic or residence use, with those resulting in the average minimum earnings, (sales to large power users), the following data is obtained:

	Domestic or Maximum Rate Schedules	Wholesale Power or Minimum Rate Schedules
No. of Consumers	1,054,130	4,125
K. W. H. Sold	395,674,000	2,893,818,000
No. of Consumers	1,054,130	4,125
Average Price per K.W.H.	8.4 cents	1.35 cents
Average use per Consumer	375K.W.H.	700,000K.W.H.

Therefore, there are 255 domestic consumers for each power consumer.

The total consumption of energy by the large power users is 7 times greater than that used by the domestic consumers.

The amount of money paid by the domestic consumer is approximately the same as that paid by the large power consumers.

The average price per K.W.H. paid by the domestic consumer is six times greater than the average price paid by the large power consumer.

The maximum average price paid under any schedule is 24.5 cents per K.W.H. and the minimum average price paid under any schedule is 1.13 cents per K.W.H., exclusive of off-peak or interchange power. The lowest average price paid for any power sold was 7.6 mills.

LOAD CURVE DATA

The load curve data (see Appendix pages 80 and 81) is of particular importance in establishing the fact (quite contrary to general impression) that domestic use of power is off peak power, therefore power used for lighting need not earn a higher rate, due to the demand of this service establishing the maximum capacity of power plant equipment.

Typical daily load curves were received from 40 companies representing 98% of the total energy generated within the state. Of these 40 companies, 11 had the peak load of the year between the hours of 4 P. M. and 10 P. M., which is the peak period of the lighting load. (Appendix page 80 to 85) The peak of 29 companies occurring during the hours of 8 A. M. and 2 P. M.

The following table indicates the maximum peak load of the year for each of the companies reporting (which establishes the station capacity) assuming that the typical daily load curve as furnished for each month is similar for each working day.

TIME OF MAXIMUM PEAK LOAD
(500 K. W. OR OVER)
Time and K. W. of Peak (1000 K. W.)

No. of Co.	9 A. M. or earlier	10 A. M.	11 A. M.	2 P. M.	5 P. M.	P. M. or later
6	4.9					
7	.6					
3	1.3					
8	212.					
10	25.					
11	11.3					
19	9.8					
5		6.2				
13		29.5				
36		1.4				
39		1.1				
40		180.5				
12		9.				
34		77.6				
36		1.4				
17			14.8			
18			2.			
25			3.4			
29			47.6			
31			40.			
33			140.			
37			36.2			
20				18.9		
9					21.8	
21					.3	
26					17.9	
35					.9	
37					34.8	
30					315.3	
1						1.6
23						1.
24						7.
20						2.
Totals	264.9	306.70	284.00	18.9	391.6	11.6 = 1,277.7

The total of the individual peaks of each company required a station capacity (exclusive of reserve units) of 1,277,700 K.W. The peak load during the lighting period of the day not considering diversity of load between companies, was 403,200 K.W., of which the Philadelphia Electric Company had a peak of 315,600 K.W. occurring at 5 P.M.

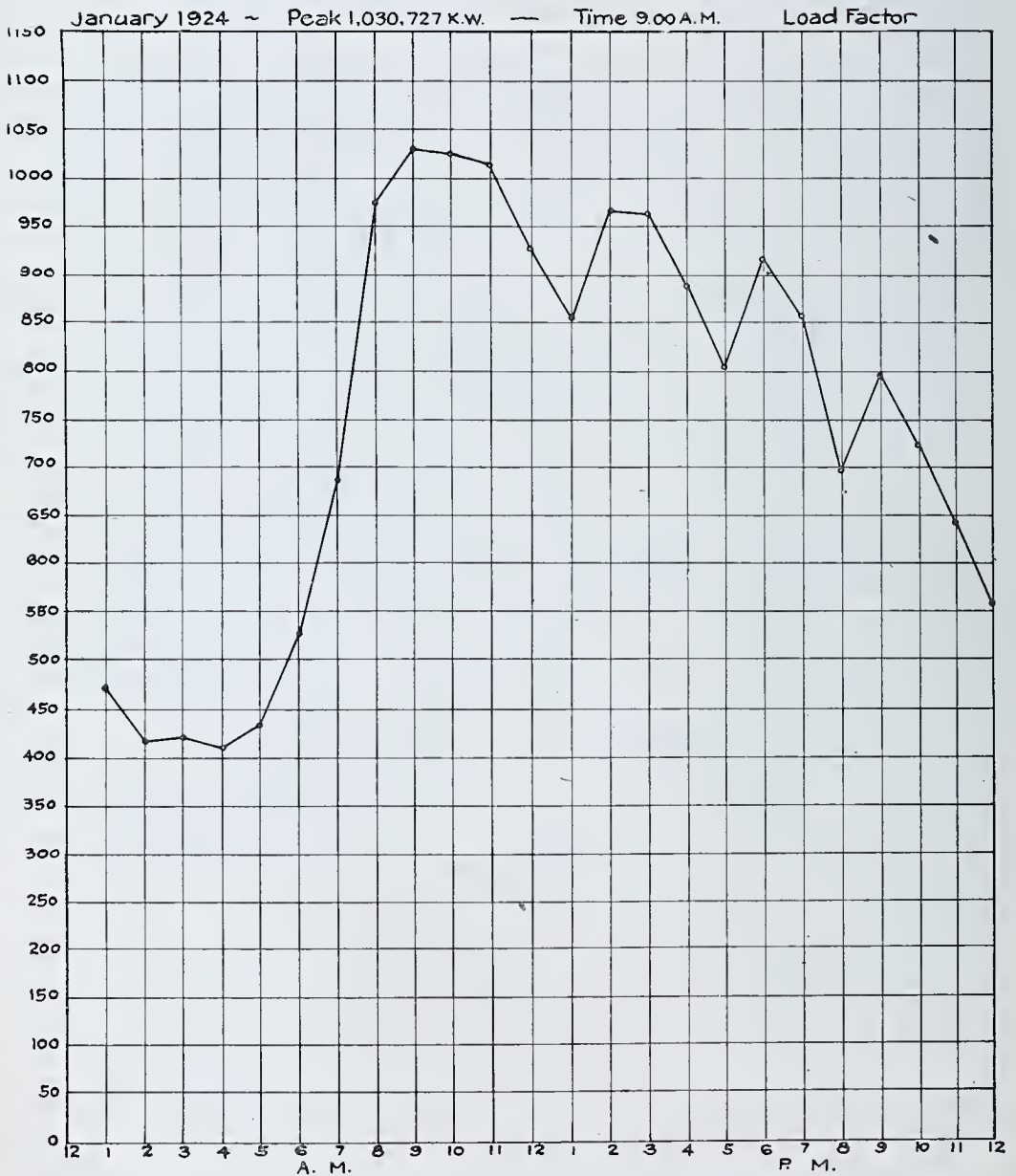
The diversity of load between each company results in a composite loadcurve having a maximum peak of 1,107,685 K.W. at 9 A.M. in December. To obtain an approximate average of the monthly load for the state, the individual typical daily load curves for the months of January, May, August and December were selected and combined into one curve for each of these months. (See pages 19, 20, 21 and 22).

It will be noted that with a properly interconnected system the peak at all periods of the year is in the morning hours between 8 and 12 o'clock.

Of equal importance is the tendency of the increased use of electric power to increase the load factor. The annual load factors based on the maximum peak for the individual companies varies from 16% to 74%. Sixteen companies have an annual load factor in excess of 40%. The load factor of the typical combined load curves for the state, representing the load of an average working day exclusive of Saturdays and Sundays is in excess of 70%.

These combined load curves indicate that the annual load factor of a completely interconnected system for the state during 1924 would have been approximately 54% with a maximum peak load of 1,107,685 K.W. occurring between the hours of 8 and 12 o'clock in the morning.

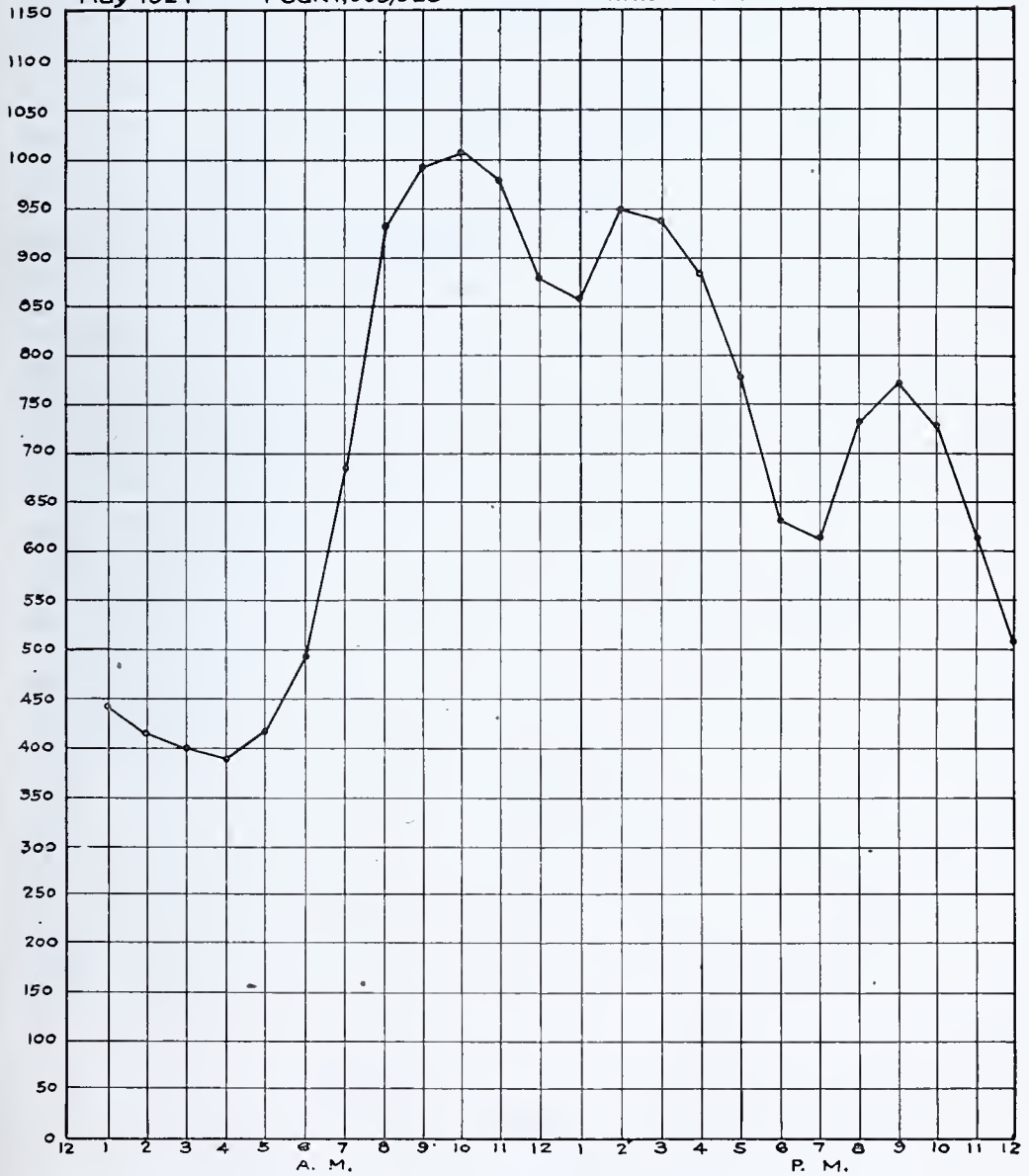
COMBINED LOAD CURVE
 ~ OF THE ~
 TYPICAL DAILY LOAD CURVES
 SUBMITTED BY 40 COMPANIES



COMBINED LOAD CURVE
 — OF THE —
 TYPICAL DAILY LOAD CURVES
 SUBMITTED BY 40 COMPANIES

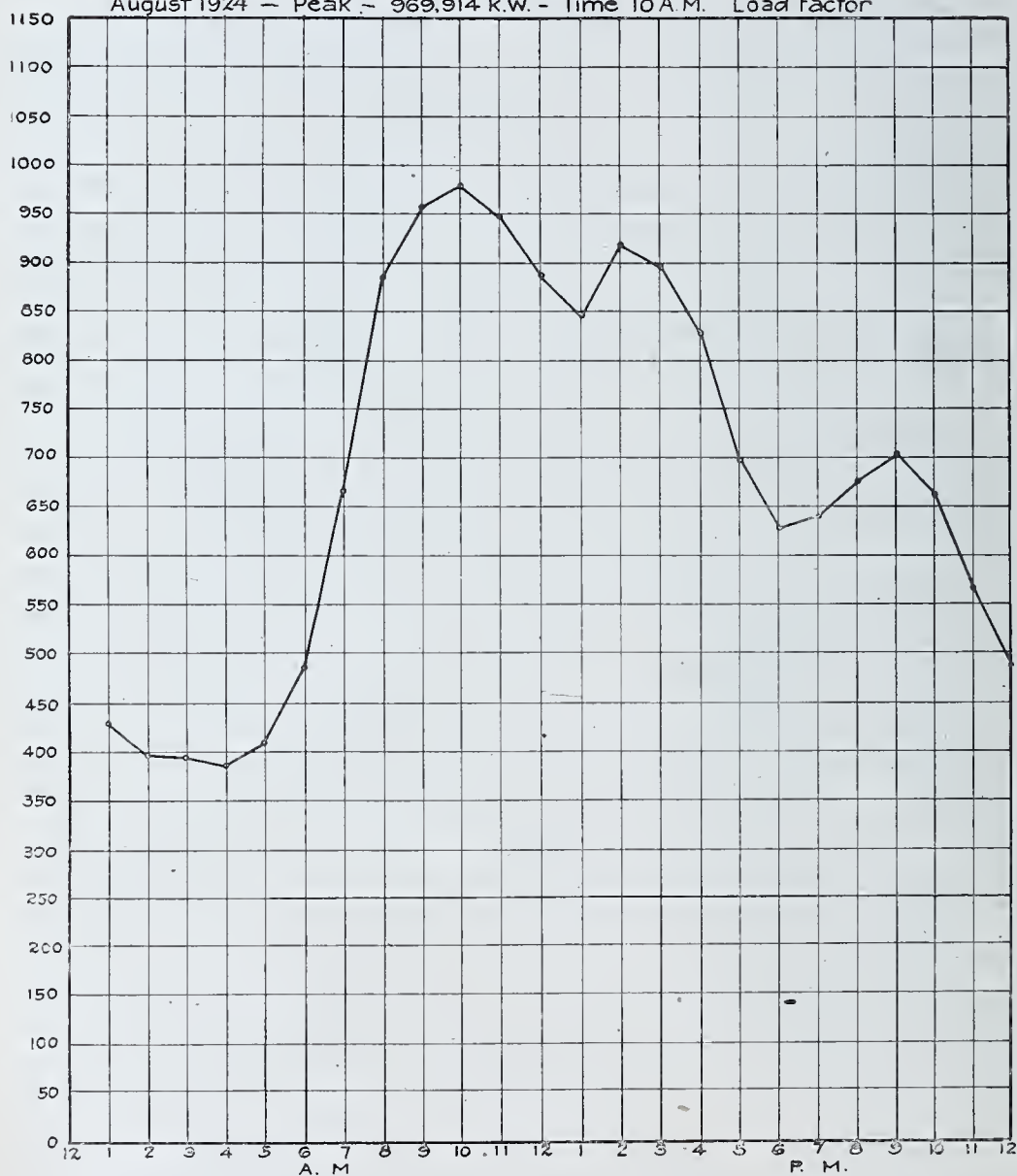
May 1924 — Peak 1,005,923 K.W.

Time 10 A.M. Load Factor

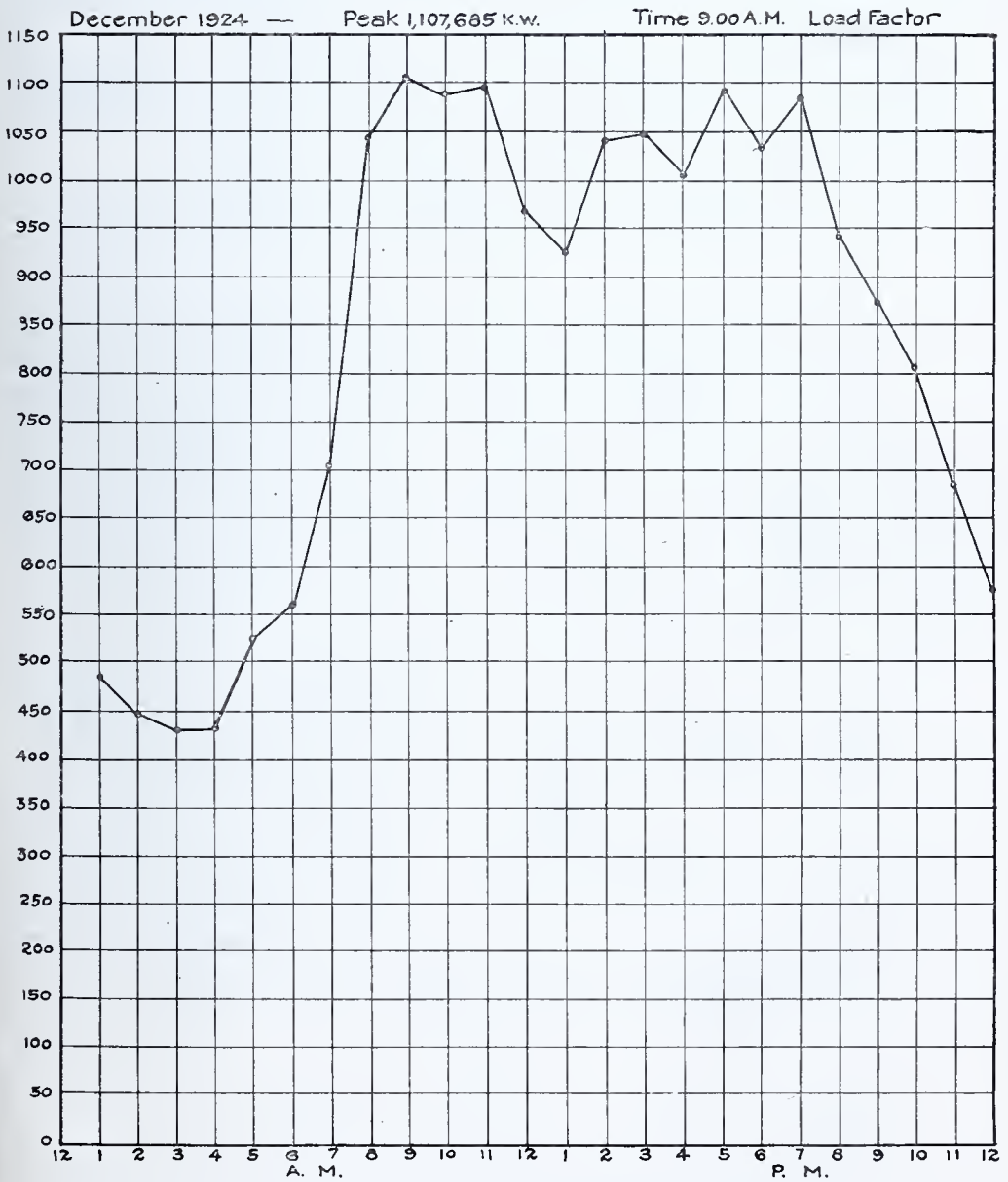


COMBINED LOAD CURVE
~OF THE~
TYPICAL DAILY LOAD CURVES
SUBMITTED BY 40 COMPANIES

August 1924 - Peak - 969,914 k.w. - Time 10 A.M. Load Factor



COMBINED LOAD CURVE
 ~ OF THE ~
 TYPICAL DAILY LOAD CURVES
 SUBMITTED BY 40 COMPANIES



ENERGY LOSS DATA

The data submitted to indicate losses by schedules (see Appendix pages 86 to 91) and varies from 25% to 41% for circuits up to 440v., voltage of the transmission or distribution system (see Appendix pages 86 to 91) and varies from 25% to 41% for circuits up to 440v., from 6 to 34% for circuits from 2300v. to 6600v. and from 4 to 9% for high tension transmission lines. The overall losses vary from 9 to 17% for the larger companies and as high as 40% for the smaller companies.

Applying the data furnished to the classification of rates the following estimate of losses as it affects each class of rate schedules is obtained.

ENERGY LOSSES AS ESTIMATED BY COMPANIES
FOR EACH CLASS OF RATE SCHEDULES

	Duquesne Light Co.	Scranton Elec. Co.	Phila. Elec. Co.	Penna. Pwr. & Lt. Co.	East Penn Elec. Co.	Home Elec. Co.	Keystone Power Co.	West Penn Pwr. Co.	Luzerne County Gas & Elec. Co.	Chester Lt. & Pwr. Co.	Counties Gas &
Domestic Lighting	26	28	19	40	37	30	27	30	29	41	29
Domestic Power	10.5	28	19	30	37	30	27	30	12	41	29
Commercial Pwr. & Lt.	28	28	19	40	37	30	27	30	15	41	21
Industrial Pwr. Secondary	12.5	28	13	20	15	20	25	28	6	34	10
Wholesale Pwr. Secondary	10	6	5	15	15	20	12	28	6	34	10
Wholesale Pwr. Primary	9.9	6	5	5	9	15	10	9	6	4	4
Special Contracts	5	4	5	5	7	10	10	...	6	...	4
Flat Rates	21	...	25	...	25	10	10	11	19	41	7
Interchange Pwr.	2	...	...	5	4	...	...	9	6	...	...
Off Peak Pwr.	7	...	5	5	...	...	...	...	...	...	...

The method of arriving at the losses applicable to each class of rate schedules indicates that the energy loss in the delivery of domestic service varies from 19% to 41%, with an average of approximately 25%. The loss of energy in the delivery of wholesale power varies between 4% and 10% with an average approximately 6%.

The losses or differences between total K.W.H. generated and total K.W.H. sold by the companies furnishing this information varies between 7% and 42%. The probable average loss in the delivery of all services can be most accurately estimated from the figures submitted by the larger companies, as follows:

Company	K.W.H. Generated	K.W.H. Sold	% Loss
Phila. Elec. Co.	1,313,297,283	1,153,495,308	9 %
Counties G. & E. Co.	88,015,668	78,138,931	11 %
Duquesne Lt. Co.	1,098,637,867	981,846,108	9 %
West Penn Pwr. Co.	77,010,275	680,628,995	17 %
Luzerne Co. G. & E. Corp.	77,010,275	70,523,318	81 %
Pa. Pwr. & Lt. Co. ....	...	559,283,912	111 %

These figures indicate that the average total loss can be estimated not to exceed 12%.

CONCLUSIONS

This study indicates the need of a careful analysis of rate schedules by the Public Service Commission before they are accepted.

- First: To ascertain the need of the new rate;
- Second: Is it discriminatory as to its effect on existing schedules?
- Third: What will it cost to serve under its terms?
- Fourth: Will the rate earn a fair return consistent with the schedules in force?
- Fifth: Is it consistent as to form with rates now on file?
- Sixth: What is the capital investment of the company on which this rate in addition to all other rates must earn a fair return?
- Seventh: Does it conform to established principles for simplicity and uniformity?

Such supervision over rate schedules will materially simplify the complication and difficulties which existing schedules present in cases of controversy or complaint. It will go a great way in taking the mystery out of electric schedules. A glance at the 800 odd schedules listed in this report will indicate the utter disregard of standardization either as to form or price, not only between companies but by the properties operated by the same organization, under similar conditions in approximately the same locality.

Numerous schedules differ in form but result in precisely the same net cost to the consumer. Rearrangement of constants would result in eliminating hundreds of different rate schedules, leave both the company and the consumer in exactly the same position and would make it possible for the layman to make an intelligent comparison of the price paid for power.

Uniformity in schedules would simplify the records of the Bureau of Rates & Tariffs and materially increase the efficiency of the Commission in disposing of informal complaints both to the advantage of the consumer and company.

The report of the Committee on Public Utility Rates of the National Association of Public Utility Commissions at their 1925 convention, calls attention to the need of supervision over rate schedules as follows:

“Here we find great variations and unusual complexities in rate schedules. In the interest of good public relations concerning which we heard so much good yesterday, we believe the attention of many companies and the influence of many commissions could well be directed to a greater simplicity in electric rate schedules. The foundation of good public relations is a sure understanding. What the public cannot understand, they are slow to accept. It is difficult for the public to understand the fundamental economies of a two-part charge divided into service and commodity charges. It is more difficult for them to understand a three-part rate, adding a demand charge to the other two even though it is more logical than the other. But to attempt to analyze some of the schedules now in use by some companies may well tax the intelligence of the public beyond all measure.

"There is one factor resulting from these diversified schedules to which attention may well be directed. This is the wide variance in the prices resulting therefrom. No one can seriously deny the right of companies to charge lower rates to certain classes of consumers and for various reasons all of which have often been discussed at length before this Association. But is it not possible, in the rapid growth of the electrical industry, that it has been overdone? After all it is the same power manufactured in the same plant from the same or similar coal and goes out over the same or similar wires. The considerations of load factors, peak loads, long and short time users, users in bulk, and other similar considerations without doubt affect the price at which electricity may be sold. But does it account for some of the extreme differences that have grown up in some companies? Are we being blinded by phraseology? It would seem today as if the ordinary light users who pay the maximum rate, contribute in many instances a large share of the gross-revenue and use only a small proportion of the generated power. Perhaps in the case of some companies these should receive greater consideration than they have had recently.

"Right along that line, the practice of some companies in entering into long-term contracts at low rates should be discouraged. It is suggested that such contracts should at least contain a provision for an adjustment of the rates paid thereunder at periodical intervals during their life. There ought not to occur in the future any situation where a company is selling a large amount of power under a special contract at less than the actual cost of generating that power."

The ideal result of standardizing rates would be to reduce the number of different schedules necessary to the smallest number and designate each schedule with a permanent index, indicating the companies filing or operating under each schedule.

The national movement of standardization can well be applied in the consideration of rate schedules of the future.

The disregard of costs in preparing rate schedules is clearly indicated by the position taken by the companies on this question.

The rates for small consumers carry a far larger proportion of costs than the large consumers, emphasized by such wholesale rates in which the bare cost of production becomes approximately the price paid for the service by the consumer.

This discrimination is directly responsible for the great spread in the cost of service between the large and small consumer and deprives or restricts such use of electric power by the people as would make a more contented and livable existence, particularly in rural or farming districts.

Twenty-four percent of the income from electric service is paid by the small or resident consumer and his use of power is only 7% of the energy which produces the total income with the result that great economy is practiced in the use of the service by the small consumer to keep his cost of power within the home budget allowance which appears to limit the use of power for the average consumer to about 350 K.W.H. per year.

So apparent is this limit that where the average cost of service is 10 cents or over the use is limited to an average of less than 270 K.W.H per year while with a rate of 6 cents or less the average use increases 100%.

A proper allotment of costs justified by allowance for off peak power supplied for domestic consumption (70% of the power supplied for domestic service is off peak) would very slightly increase the existing rates to large consumers, materially reduce the domestic rates and leave the gross earnings to the company the same.

For example an increase of 2 mills per K.W. on all consumption other than domestic service, applying this increase to a reduction in domestic rates would result in a 30% reduction in the average rate. This would relieve the extreme need of economy in the use of service so that the full benefits and convenience of electricity in the home could be utilized.

Summing up the outstanding features of this study, we have:

- First: Rates should be standardized;
- Second: Cost allocation for each rate in a schedule should be submitted with each rate schedule when filed, showing in detail the cost to the company to furnish the service covered by the schedule.
- Third: Domestic service is largely off peak and should be rated as such.
- Fourth: The discrimination in favor of wholesale power should be corrected.
- Fifth: The annual reports as filed by the companies including all Rate Schedules of the Electric Power Utilities should be abstracted and tabulated for ready and up-to-date reference so that the analyses of new rates as filed can be given prompt and effective consideration.

Appendix X

REPORT OF STUDY OF COST TO SERVE ELECTRIC
POWER CONSUMERS
BY THE
ELECTRIC POWER UTILITIES IN THE STATE OF
PENNSYLVANIA
BASED ON 1924 DATA

THE PUBLIC SERVICE COMMISSION OF THE COMMON-
WEALTH OF PENNSYLVANIA
BUREAU OF ENGINEERING

BY O. M. RAU

1926

SECTION 1 — Report¹

¹For Statical data see Section 2 (in press).

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INTRODUCTION

Effort was made to obtain from the electric power utilities in the state the allocation of costs by which they arrived at the charges for service as per schedule filed with the Bureau of Rates and Tariffs. The practical result was an almost general admission by the companies that no such allocation of costs could be made, and that the rate schedules were not arrived at by the elements of cost but from experience and competition.

The contention therefore that the rates do not reflect costs is fully sustained and that where no *Competition* exists the highest rates are charged and where there is competition rates sufficiently low to get the business are made irrespective of the cost to serve.

To arrive at a reasonable analysis of costs this study was undertaken. In addition to the data submitted in reply to the questionnaire referred to in the rate spread report (see file May 12, 1926) the annual reports of the companies for 1924 were consulted (see appendix).

ANNUAL REPORTS

The reports of all companies were carefully studied and it was evident that only the larger companies supplied data of sufficient detail to be of value, therefore only the report of the companies in Classes "A" and "B" are referred to in this report.

The reports of eighty companies are analyzed and tabulated in detail with a general summary of 85 class "C" and 52 Class "D" companies (see appendix).

Note:-Pennsylvania Water & Power Company report omitted as this company delivers approximately 70% of the total K. W. H. sold beyond the state border.

CLASSIFICATION OF ACCOUNTS

Considerable attention was given to the classification of accounts so that a reasonable basis for allocating the expense to the various rate schedules could be arrived at. The classification of expenses under principal headings as follows were analyzed:

- K. W. H. generated, purchased and sold
- Classification of Consumers
- Operating Expenses Grand Totals
- Generating System Operating Expenses
- Electricity Generated by Others
- Transmission System Operating Expenses
- Distribution System Operating Expenses
- Utilization System Operating Expenses
- Commercial Department Operating Expenses
- New Business Department Operating Expenses
- General Administration Expenses
- Other General Expenses (allocated as Fixed Charges)
- Fixed Capital

ALLOCATION OF COSTS

The expenses as filed in the annual reports under these classifications are allocated to the class of rate schedules for which the expenses were incurred and where direct allocation could not be made, apportioned in accordance with the controlling factors, it being understood that each company can readily obtain accurate figures on which to base all costs.

The reports to the Public Service Commission as now submitted are not classified so as to give the data necessary for allocating costs to rate schedules. Particularly in this true as to fixed capital, and for the purpose of this report estimates for apportioning capital expenditures for Generation, Transmission, Distribution, etc. had to be made, all of which can be accurately ascertained by each company, therefore in applying estimates on a state-wide study they may vary considerably from the actual figures of an individual company.

APPORTIONMENT OF EXPENSES

A careful study was made of the expenses which could not be applied to a particular class of service. These expenses are apportioned by the factor which directly affects such expenditures and apportioned to the class of rate schedules in the proportion that the service caused the expenses.

SUMMARIES

Before analyzing each classification the following general summaries are submitted:

Total Fixed Capital of the companies analyzed (these companies representing 59% of total fixed capital of all companies in Pennsylvania) ("C" and "D" companies Total Fixed Capital \$6,021,276).		
80 Class "A" & "B" Companies total fixed capital ..		
Average Fixed Capital per Consumer (1,274,597) ..		432.50
Average Fixed Capital per KWH. Sold (5,637,090,000)		.098
Maximum Fixed Capital of any one company	\$199,593,485	
Minimum Fixed Capital of any one company	31,775.00	
Maximum Fixed Capital per Consumer	555.00	
Minimum Fixed Capital per Consumer	28.00	
Maximum Fixed Capital per KWH. Sold	0.36	
Minimum Fixed Capital per KWH. Sold	0.0065	

Eliminating such companies which have abnormal figures, the maximum and minimum figures range as follows:

	<i>Max.</i>	<i>Min.</i>
Fixed Capital per Consumer (13 Co's. omitted)	\$555.00	\$100.00
Fixed Capital per KWH. sold (15 Co's. omitted) .....	.136	.015
Total Operating Expenses	\$82,096,499.00	

Subdivided according to classification of accounts of the P. S. C. as follows:

	<i>Min.</i>	<i>Min.</i>
Other General Expenses:		
Total for all Companies	\$18,487,204	
Of which taxes amounted to	6,215,848	
and Renewals and Replacements	7,813,960	
Maximum expenses per K. W. H. sold ..		1.58 Cents
Minimum expenses per K. W. H. sold ..		.0339 Cents
Average expenses per K. W. H. sold ....		.328 Cents
% of Fixed Capital		3.9%
Max. % of Fixed Capital paid in taxes .		
(5 Co.'s omitted)		3.9%
Min. % of Fixed Capital paid in taxes.		.3%
Avg. % of Fixed Capital paid in taxes .		1.16%
Max. % of Fixed Capital exp. for Ren. & Rep. .		10.6%
Min. % of Fixed Capital exp. for Ren. & Rep. .		.04%
Avg. % of Fixed Capital exp. for Ren. & Rep.		1.42
Administrative Expense:		
Total for all Companies	\$4,490,002	
% of Fixed Capital		0.82%
Max. Exp. per KWH. Sold		
(omitted)		0.72
Min. Exp. per KWH. Sold		0.0258 Cents
Avg. Exp. per KWH Sold		0.08 Cents
Max. Exp. per Consumer		
(5 Co.'s. omitted)		\$8.35
Min. Exp. per Consumer .....		.93
Avg. Exp. per Consumer		3.52
Generating System Operating Expenses:		
38 Companies generating over 50% of Power sold (of which 13		
companies generated all power sold)		
Total Expenses	\$33,309,582	
Of which Power Purchased cost	5,134,953	
Avg. Operating Exp. per KWH. Gen. ..		.572 Cents
Avg. Exp. per KWH. Purchased Power .		.78 Cents
Avg. Operating Exp. per KWH. Sold ..		.685 Cents
Oper. Exp. per KWH. Generated	4.8	0.087 Cents
Oper. Exp. per KWH. Power Gen. & Pur .	4.8	.256 Cents
Oper. Exp. per KWH. Sold	6.4	.28 Cents
42 Companies purchasing over 50% Power Sold of which 34 comp-		
anies purchased all power sold.		
Total Expenses	\$5,519,139	
of which Generating Exp. were	138,963	
Avg. Exp. per KWH. purchased		1.06 Cents
Avg. Operating Exp. per KWH. Gen-		
erated		2.02 Cents
Avg. Operating Exp. per KWH. Sold .		1.2 Cents
	<i>Mar.</i>	<i>Min.</i>
Oper. Exp. per KWH. Power Pur. & Gen.	3.25	.77
Oper. Exp. Power Purchased	3.25	.77
Oper. Exp. Power Sold	3.62	.895
Transmission Expenses		
(No data available of KWH, transmitted)		
Total Transmission Expenses	\$5,079,171	
Max. Exp. per KWH. Sold		0.75 Cents

	<i>Max.</i>	<i>Min.</i>
Min. Exp. per KWH. Sold		0.0011 Cents
Avg. Exp. per KWH. Sold		0.09 Cents
Distribution Expenses:		
Total Distribution Expenses	\$6,856,878	
Max. Exp. per KWH. Sold	2.1	Cents
Min. Exp. per KWH. Sold	0.003	Cents
Avg. Exp. per KWH. Sold	0.124	Cents

Omitting five companies having abnormal figures the range is as follows:

	<i>Min.</i>	<i>Min.</i>
Expenses per KWH. Sold	0.93 Cents	0.0196 Cents
Based on number of customers the expenses are as follows:		
Max. Exp. per customer	\$25.00	
Min. Exp. per customer	1.35	
Avg. Exp. per customer	5.95	

Omitting seven companies having abnormal figures the range is as follows:

	<i>Max.</i>	<i>Min.</i>
Expense per Customer served	\$8.80	\$2.28
Utilization Expenses:		
Total Utilization Expenses	\$3,276,952	
Max. Exp. per KWH. Sold	0.63	Cents
Min. Exp. per KWH. Sold	0.0027	Cents
Avg. Exp. per KWH. Sold	0.058	Cents
Commercial Expenses:		
Total Commercial Expense	\$3,501,604	
Max. Exp. per KWH. Sold	0.97	Cents
Max. Exp. per KWH. Sold	0.00925	Cents
Avg. Exp. per KWH. Sold	0.062	Cents
Max. Exp. per Consumer	\$6.70	
Min. Exp. per Consumer	0.08	
Avg. Exp. per Consumer	2.74	

Omitting eight companies having abnormal figures the range is as follows:

	<i>Max.</i>	<i>Min.</i>
Per KWH. Sold	0.605	0.0156 Cents
Per Customer	\$4.25	\$0.40
New Business Expenses:		
Total New Business Expenses	\$1,587,967	
Max. Exp. per KWH. Sold	0.755	Cents
Min. Exp. per KWH. Sold	0.00097	Cents
Avg. Exp. per KWH. Sold	0.028	Cents

SUMMARY

	Total	Per K.W.H. Sold	Per Con- sumer
Other Expenses	\$18,487,204	0.328 Cts.	.....
Administration	4,490,602	0.08 "	\$3.52
Generating System {	33,309,582	0.685 "	.....
	5,519,139	1.2 "	.....
Transmission	5,079,171	0.09 "	.....
Distribution	6,856,878	0.124 "	\$5.95
Utilization	3,276,952	0.058 "	2.75
Commercial	3,501,604	0.662 "	2.74
New Business	1,587,967	0.028 "	1.24
<hr/>			
Total Operating Expense	\$82,096,499	Ave. 1.46 Cts.	\$64.50
Operating Revenue	127,652,524	2.45 Cts.	\$100.00
(Including "B" and "C" Companies)			
Fixed Capital	\$551,271,770	\$0.098	\$432.50
("A" and "B" Companies only)			

CLASSES OF SERVICE

To allocate costs to each class of service for which a rate schedule is filed the classification in the rate spread report is adopted which is as follows:

Residence of Domestic Lighting
Domestic Power, Cooking and Heating
Commercial Light and Power
General Power
Wholesale Power Primary and Secondary
Special Power Contracts
Flat Rate Service
Interchange Power
Off Peak or Restricted Power
Miscellaneous Schedules

APPORTIONMENT OF OPERATING EXPENSES

The largest item in operating expenses is included in generating system operating expenses. The apportioning of these expenses is self evident and is made on a K. W. H. basis up to the outgoing distribution feeder and transmission system.

The generation of a K. W. H. cannot be produced for a particular class of service except in isolated cases such as arc lighting, 25 cycle power generated for a specific service etc. Such instances are of minor importance and so small a percentage of the total output when considered in a state-wide problem as to be negligible in the final result.

With the growing tendency to obtain power from the most effective and efficient prime mover sources the possibility of apportioning generating system operating expenses to any class of service is not only becoming difficult, but ridiculous.

As indicated by the foregoing summary, the total generating system operating expenses for the eighty plants included in their reports, which represent 90% of the power sold in Pennsylvania for the year 1924, was \$38,828, 721.

Total generating system operating expenses as classified in the reports to the Public Service Commission includes purchased power. To arrive at the expenses for Prime Power so that no duplication of costs occur, the power generated within the state for which the operating expenses are included in the company's report plus such power purchased for which no costs of generation are filed, will approximate the actual generating system operating expenses for the prime power used within the state.

The only power generated for which no reports are filed with the Public Service Commission is that generated beyond the state borders. It is estimated that the total amount of power imported was approximately 360,000 K. W. H.

The interconnection of prime power sources and the efficiency and reliability of long distance transmission has placed into discard the old and established principle of assuming prime mover capacity must be provided for a specific class of service. The use of prime mover capacity is applicable for all service. The demand for lighting service which required generating capacity for the peak load of that service is no longer idle for a prolonged period of the day and the same capacity becomes available for the peak demand of other classes of service, not only in the local district but practically throughout the state. Idle capacity in York County may be used to carry the peak load in Dauphin County. Idle capacity in Erie County may be used in Fayette County and so on indefinitely as consolidation of the power utilities or interconnection is perfected.

Therefore the diversity of a class of service of a local company has changed to the diversity of all service in the area served by a controlling company or interconnected with prime power sources.

This ability to use prime power sources for the diversity in all classes of service established the basis for allocation of costs of power production on system load factor in place of the diversity of a given class of service.

The cost of generating power for all classes of service therefore is the same for all classes, based on the annual load factor of the plant, and any class of service using power in excess of this average load factor is entitled to receive such excess as off peak (off load factor) service.

This simplifies the allocation of cost of power at the station bus for all rate schedules to (A) Cost of power at annual load factors and (B) Cost of power in excess of annual load factor. Total transmission and distribution system operating expenses are apportioned on the same principle as generating system operating expenses.

Utilization system operating expenses and commercial department expenses are apportioned on the basis of number of consumers.

New business department expenses are apportioned on the K. W. H. sold basis.

General administration expenses cover the management of the entire property and apply more or less to each of the classified accounts. In apportioning these expenses the importance of the functions of the administrative organization to each of the accounts is estimated to be as follows:

Generating System	25%
Transmission System	10%
Distribution System	10%
Undistributed	55%
Total	100%

The undistributed portion of these expenses are allocated on the basis of K. W. H. sold.

Other general expenses cover principally taxes, insurance, renewals and replacements, etc., and are apportioned as fixed charges.

GENERATING SYSTEM EXPENSES

The allocation of generating system operating expenses for all schedules becomes the unit cost per K. W. H. The allocation of fixed charges on generating system capital investment becomes the unit cost K. W. H. at the system load factor.

Taking the system for the state as a whole, the total generating system operating expenses for the eighty companies included in the study for the year 1924, was \$38,828,721, and the K. W. H. sold by these companies 5,637,090,000 K. W. H. The cost per K. W. H. sold being 6.9 mills per K. W. H., including power purchased for resale.

Of this number of companies, 49 have generating plants of which 44 generate power and have prime mover capacity (including stand by capacity) of 1,958,866 K. W. and during 1924 generated 5,270,551,000 K. W. H. Generating system operating expense for these 44 companies was \$28,421,283 at an average cost of 5.3 cents per K. W. H.

The capital charges cannot be accurately apportioned from the data available of these companies, therefore an assumed fixed capital per K. W. of capacity must be arrived at.

Various costs per K. W. are available and range from \$70.00 to \$140 per K. W. for plants recently constructed. Therefore as an approximate figure \$120.00 will be used considering that many of the plants were built before or after the period of maximum costs.

The total plant capacity of the companies generating power being 1,958,866 K. W., the fixed capital at \$120.00 per K. W. represents a total investment \$235,063,920. To allocate operating expenses and fixed charges including fair return on the fixed capital, other expense accounts must be analyzed and are apportioned as follows:

Generating system operating expense	100%
Transmission System operating expense	0
Distribution " " "	0
Utilization " " "	0
Commercial Dept. Expense	0
New Business Dept. Expense	0
General Administration Expense	25%
Other General Expense	
Taxes (based on capital)	2%
Renewals and Replacements (based on capital)	3%
Insurance (based on capital)	1%

Generating system operating expenses include all expenses directly chargeable to generating costs and therefore no apportionment is necessary. General administration expenses can be apportioned on a fixed capital basis or on the relative importance of the administrative functions to the activities of the company. Thus a company only generating power for distributing by one or more power utilities would apportion administrative expense 100% to generating system while a company having an extensive transmission, distribution and sales organization would apportion these expenses at a relatively lower percentage to generating system expense.

Three companies disposing of all power generated at wholesale to distributing companies have a fixed capital of \$593,963, generate 27,742,000 K.W.H. and have a general administrative expense of \$8,715.00. On a fixed capital basis the apportionment of this expense will be 1-½% and on a K.W.H. generated basis 0.0316 mills. This indicates that the function of the executive organization is largely that of business management and by apportioning this expense on a basis of 25% to generating system expense, it will cover any reasonable costs necessary for general administration of the generating system. The total administration expense for 1924 was \$4,490,002 by apportioning \$1,125,000 (25%) to generating system expense, equals approximately ½ of 1% on the fixed capital or 0.02 mills per K.W.H. sold.

Other general expenses pertaining to generating system include principally the items of taxes and renewals and replacements (depreciation reserve) and insurance (fire, injuries and damages reserves) all these items are directly dependent on the fixed capital,

Taxes for the year 1924 for the eighty companies covered by this study averaged 1.16% of the total fixed capital of these companies, therefore an allowance of 2% for taxes of the fixed capital for generating system is a reasonable apportionment for this item, to the generating system expenses.

Renewals and replacements during 1924 averaged 1.42% of the total fixed capital. Therefore an allowance of 3% of the fixed capital for generating system is ample to cover the items of renewals and replacements (depreciation reserve).

Insurance accounts vary considerably by different companies, although a allowance of 1% of the total fixed capital appears to be an average maximum of the companies covered by this report which is allowed for this item.

Fair return (Interest on Fixed Capital) is assumed at 7% of the fixed capital.

To allocate the costs based on Fixed Capital to the rate schedule, the load factor or time the investment is employed must be arrived at. As previously stated, the fallacy of assuming any part of a system is held in readiness to serve for a particular class of service is apparent, the average use of the generating equipment for all service is a true basis for allocating fixed charges.

The average load factor of the generating system of the state for the year 1924 was approximately 54% (see rate spread report).

Estimating the fixed capital invested in the generating system at \$235,063,920, the fixed charges at 13% will be \$30,558,309. The difficulty of separating generated and purchased power so that no duplication of fixed charges are included in the cost to serve is apparent, therefore the allocation of the expense per K.W.H. is based on the output of the system exclusive of the power purchased from beyond the state border, it being assumed that the price at which this power is purchased includes the fixed charges.

The individual peak loads of 40 companies from which data was available (see rate spread report) totalled 1,222,338 K.W. and the generating plant capacity 1,714,791 K.W., indicating a capacity factor of approximately 70%. The total power sold, 5,637,090,000 K. W. H. required a prime power generation of this amount of energy plus losses, less power resold for local distribution.

It is estimated that of the total sales 2,000,000,000 K. W. H. are delivered as primary power with average losses estimated at 5% and the balance (3,637,090,000 K. W. H.) is delivered as secondary power on which the average losses are estimated to be 35%. Therefore the total prime power required would be as follows:

Primary Service	(2,000,000,000 K.W. with 5% loss)	2,100,000,000
Primary	" (3,637,090,000 K.W. " 35% ")	4,910,071,500
Total Prime Power		7,010,071,500

The total power generated and purchased by the 80 companies is reported as 6,459,668,000 K.W.H. (see appendix Table "A") of which 5,270,551,000 W.W.H. was prime power generated by plants within the state plus approximately 150,000,000 K.W.H. delivered to local companies by the Pennsylvania Water and Power Company, which is included in purchase power. Therefore the total prime power generated within the state (exclusive of the power generated at Holtwood delivered beyond the state border) is approximately 5,420,551,000 K.W.H. Of the purchase power it is estimated 360,000,000 K.W.H. was obtained from beyond the state border, assuming this to be prime power the total prime power generated and purchased amounted to approximately 5,780,000,000 K.W.H.

The difference between generated and purchased power as reported and the prime power generated and purchased is power resold for local distribution.

At 100% (8760 K.W.H.) load factor the fixed charge per K.W.H. will be 13% of the fixed capital (\$120.00) or 15.60, which equals 1.8 mills per K.W.H. generated. At a load factor of 54%, the fixed charge per K.W.H. generated will be 3.32 mills per K.W.H. generated.

The load factor of the generating system does not take into consideration the capacity of the generating system in excess of the peak demand. The development of interconnection reduces materially the capacity required above the peak demand, therefore the 30% indicated as necessary during 1924 may be considered excessive.

At a capacity factor of 70% the fixed capital is 30% in excess of that required to generate the peak load, the fixed charges on this excess capacity must be absorbed in the cost per K. W. H. generated. The fixed charges based on a 100% capacity factor being 3.32 mills per K. W. H. at 70% the fixed charges will be increased to 4.31 mills per K. W. H. generated.

The allocation of costs of the generating system expenses to all rate schedules with the exception of off-peak service (energy used in excess of the annual load factor) will be as follows:

Expenses of Generated Power:

Companies Gen. greater part of power sold ..	\$28,282,320
Companies Pur. greater part of power sold ..	138,963
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Total expense of <u>Generated Power</u>	\$28,421,283
Prime Power from Holtwood (Est.)	669,217
Prime Power from beyond border (est.)	2,100,000
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Total Operating Ex. of Prime Power	31,190,500
Administration Expense	1,125,000
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Total Expense Prime Power	32,315,500
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Cost per K. W. K. Gen. Syst. Oper. Ex.	5.35 Mills
Cost per K. W. H. Administration Exp.02 Mills
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Total Cost per K. W. H.	5.37 Mills
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Total Fixed Capital (estimated)	\$235,063,920
Fixed Charges (13% of Fixed Capital)	30,558,309
Total Prime Power Generated	5,270,551,000k.w.h.
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Fixed Charge per K. W. H. Generated (54% load factor)	3.32 Mills
Fixed Charge per K. W. H. Generated for Reserve Capacity	0.99 Mills
<hr/>	
Total Fixed Charges per K.W.H. Generated	4.31 Mills
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Total Generating System expense—Cost per K. W. H. Prime Power	9.68 Mills

Basing the allocation of generating system expense on the average of the 80 companies included in this report, the schedules for all classes of power with the exception of off-peak service will have a power cost of 9.68 mills per K. W. H. and the off-peak schedules, (power used in excess of the average load factor) will have a power cost of 5.37 mills.

TRANSMISSION SYSTEM EXPENSES

From the data available it is difficult to allocate these expenses accurately. The records do not indicate what portion of the total K. W. H. generated are delivered over transmission lines, and little information is available as to what percent of the fixed capital is invested in the transmission system.

The extensive system of interconnection now installed and the general policy of high voltage generation practically eliminates the delivery of power direct from the generating system to the distribution system. In apportioning transmission expenses it is therefore assumed that at least the greater part of all power generated is transmitted and the operating expenses will be allocated to all rate schedules on the basis of transmission system expenses for K. W. H. sold.

The allocation of fixed charges of the transmission system is dependent on length of transmission and will be apportioned to the rate schedules on the basis of fixed charges per mile of transmission system.

These distances for system covered by the rate schedules of a company, however, are for normal service not of sufficient length to warrant basing costs on individual services and with the exception of the lines for interchange power schedules, service for other utilities or wholesale consumers for which a system of zones can be established, the average length of transmission for the system, exclusive of that portion included in a zoning system, will approximate a conservative unit for allocating cost to each rate schedule.

The total transmission system operating expenses for the companies covered by this report for the year 1924 were \$5,079,171 and the cost per K. W. H. sold was 0.9 mills.

The variation in transmission system operating expenses per K. W. H. sold for the companies submitting this data, ranges from a minimum of 0.01 mills to a maximum of 7.5 mills. The cost per K.W.H. sold of 41 companies was 1 mill per K.W.H.

The approximate total miles of transmission lines in the state is estimated a 10,000 miles. Assuming an average cost (which can readily be ascertained by each company) of 10,000 dollars per mile including substation, will require a capital investment of \$100,000,000.

Having concluded that all power generated is transmitted for some distance, it follows that the total capacity of the transmission system must at least approximate the prime mover capacity which is given as 1,958,866 K. W. On this basis the average fixed capital investment per K. W. of transmission line capacity is approximately 50 dollars or 5 mills per K. W. mile.

Following the same principle in allocating transmission system expenses to the rate schedules as applied to the generating system

allowing for administration 10% of the general administration expenses, the cost to cover transmission system operating expenses will be as follows:

Trans. Syst. oper. Exp. per K.W.H. sold ..	.091 Mills
Gen. Administration Exp. per K.W.H. sold ....	.008 Mills
Total Trans. Syst. oper. Exp. per K.W.H. Sold	.099 Mills

Allocating fixed charges (13% of Fixed Capital) on the basis of load factor (average use of the system) the cost will be as follows:

At 100% load factor (8760 K.W.H.) the fixed charges per K.W. of transmission system capacity will be \$6.50 (13% of \$50.00 or .0745 mills per K. W. H.

At a load factor of 54% the fixed charges per K.W.H. sold will be .138 mills.

The allocation of transmission system expenses as previously stated applies to all rate schedules. The extensive system of interconnection and the relatively few power plants in centers of distribution allows as a reasonable assumption that all power is transmitted some distance, and with the exception of instances where a zoning system will apply an average for all consumers will be as accurate as an attempt to apply a distance factor in allocating these expenses.

The total cost for transmission expenses to be allocated to all rate schedules is therefore as follows:

Total Trans. Syst. Oper. Exp. per K.W.H. sold	.099 Mills
Total Trans. Sys. Fixed Charge Exp. K.W.H. sold .....	.138 Mills
Total Transmission System Cost .....	.237 Mills
Cost for Off Peak Service .....	.099 Mills

DISTRIBUTING EXPENSES

The operating expenses of the distribution system are largely dependent on the K.W.H. sold and are more or less proportionate to the importance of the service.

Capital investment and therefore fixed charges are governed by the possible density of consumers and their demand. Perhaps 80% of the fixed capital represented by the distributing system is invested to serve the small or domestic user and usually is installed with sufficient capacity to serve the estimated ultimate requirements of a district.

Operating expenses therefore are allocated on the basis of cost per K.W.H. and fixed charges on the cost per consumer based on a measured or assessed demand.

As 80% of the consumers represent resident or domestic service requiring not to exceed an average demand of 1 K. W. the allocation of fixed charges practically amounts to an allocation on a demand basis, and the assessed demand of domestic service will vary according to the district served, in large densely populated cities the assessed demand for domestic consumers will average considerably less than in less populated areas.

The demand of commercial and secondary power service is readily ascertained and therefore no assumptions are necessary. The allocation of costs being based on load factor, the total of the measured demands plus the assessed demands must approximate the peak load on the distributing system plus a reasonable excess capacity.

The total distributing system operating expenses of the companies covered by the report were \$6,856,878 for the year 1924.

The average cost per K. W. H. including primary power was 1.24 Mills, the cost per consumer was \$5.40, maximum and minimum cost being as follows:

Cost per K. W. H. Sold	5.6 Mills	1.05 Mills
Cost per Consumer	\$8.80	\$2.28

Schedules covering primary service not making use of the distributing system, will have no cost allocation covering distributing system expenses. Correcting the above figures to include only secondary service, an estimate of the K. W. H. sold as primary service must be made as no accurate figures from which to obtain this data are available.

From the rate spread report (see file May 12, 1926) the figures indicate that of the total K. W. H. sold (5,637,090,000) approximately 2,000,000,000 K. W. H. was sold as primary service.

Allocating cost of distributing system operation expenses on the basis of K. W. H. sold to secondary consumers only, (3,637.090,000 K. W. H.) the average cost allocated to all rate schedules for secondary service will be 1.89 mills per K. W. H.

In allocating fixed charges on the basis of a measured demand for commercial and secondary power consumers and an assessed demand for domestic consumers, no attempt has been made to eliminate the number of primary consumers, as the error is too small to warrant checking this item. It being self evident that in the application of this principle of cost allocation by individual companies all the facts are available, eliminating errors which are unavoidable in a statewide study of this kind.

To arrive at the fixed charges the difficulty of obtaining the fixed capital invested in the distributing system is again apparent.

The complications of arriving at an estimate, considering the great difference in local costs particularly where extensive underground construction is employed, is apparent. It is, however, a fact that where these construction costs are high the density of consumers is also high so that the actual return per dollar invested is relatively consistent, and is so recognized in existing rate schedules which do not take into consideration service from overhead or underground systems.

From various data available on this subject the costs per consumer vary from \$50.00 to \$400.00, taking as an average figure \$150.00 and the number of consumers at 1,274,597 will require a total capital investment of \$191,189,550, or \$97.50 per K. W. of generating capacity. (1,958,886 K. W.)

In assuming that the capacity of the distributing system has the same capacity as the generating system, notwithstanding that a large part of the power is sold as primary power, consideration is given to the fact that a larger part of the power sold as primary service is resold by distributing companies over their local distribut-

ing systems. On a state-wide analysis it is quite impossible to consider in detail this condition and it is possible that the distributing system as a total may approximate the generating capacity.

The fixed charges at 13% of the fixed capital invested in distributing system will be \$24,854,64). Allocated on a consumer basis amounts to \$19.50 per consumer. On a demand basis, assuming the total equals the capacity of the system amounts to \$12.70 per K. W. at an assessed demand of 1 K. W. to each domestic consumer accounts for 1,053,130 K. W. (see rate spread report), the balance being accounted for by commercial and power service at a average demand of 4½ K. W. per consumer.

The apportionment of fixed charges on a customer basis should be revised periodically as the number of consumers increase. In a rapidly developing property such revision may be warranted annually, while a property having a high density factor the addition of new consumers may be offset by additional fixed capital invested in the distribution system.

In allocating fixed charges to the rate schedules, a cost of \$12.70 must be made to all domestic or residence rate schedules in the form of a minimum charge, service charge, assessed demand, or in a high rate for the first block of energy consumed subject to such adjustment as the measured demand of commercial and power service may effect this sum.

General administration expenses are effected by the distribution system similarly to that of the transmission system. The relative importance of administrative functions may be considered nominal as applying to the distribution system, therefore apportioning this expense at 10% of the total administration expenses is allowed for this item, which amounts to \$449,000 or .008 mills per K. W. H. sold (5,637,090,000 K. W. H.)

In allocating this cost on the basis of total K. W. H. sold, it is apparent that the error due to including primary power will increase the cost above the .008 mills, as previously stated a large portion of the primary power is distributed by local companies so that the actual cost would vary slightly from the above figures.

The allocation of distributing system expenses to the rate schedules as arrived at from the above analysis will be as follows:

Distributing Syst. Oper. Exp. per K. W. H. Sold	1.89 Mills
Administration Oper. Exp. per K. W. Sold	.008

Total distributing syst. Oper Exp. per K. W. H.	1.898
Fixed Charges per Consumer or per K. W. demand	\$12.70

UTILIZATION SYSTEM OPERATING EXPENSES

Aside from Customers Premises Inspection and Service of Trouble Department, this expense is of a specific nature such as Street Lighting Service, Sign or Display Lighting or expenses incurred for a special class of consumers for which a direct charge can be made consistent with the cost of such special service.

In allocating this expense credit must be allowed for payments received for specific charges covered by the rate schedules, which include such service as supplied under street lighting schedules: Display Lighting Schedules and particularly all flat rate service.

The remaining cost being a relatively small sum, is directly apportioned on the basis of number of consumers. The total costs for utilization operating expense for the 80 companies covered by this report for 1924 was \$3,276,952. No data is available by which a proper proportion can be credited to schedules specifically including special service as referred to above, but can readily be ascertained by each company and a correct deduction made. For the purpose of this report it is estimated that at least 50% of the total utilization expenses can be allocated directly to such schedules calling for special service, leaving a balance of \$1,638,477 to be allocated on the basis of number of consumers.

The K. W. H. cost of utilization system operation expenses (\$3,276,954) for the year 1924 averaged .058 mills per K. W. H. sold, ranging from a minimum of .0003 mills to a maximum of 6.3 mills. Eliminating extreme figures the variation ranges from a minimum of .012 mills to a maximum of .078 mills.

This expense being directly proportionate to the number of consumers, the allocation is made on a per consumer basis. Deducting the charges made direct to schedules calling for special service as noted above, leaves a total expense of \$1,638,477, or a cost per consumer of \$1.28 per annum. Being an annual charge this cost must be allocated to the rate schedule as a service charge in the manner heretofore referred to over and above the K. W. H. cost.

COMMERCIAL DEPARTMENT OPERATING EXPENSES

These expenses are directly proportioned to the number of consumers, all schedules therefore are equally affected by these costs in direct ratio to the number of consumers.

The total operating expenses of the commercial department of the 80 companies for the year 1924 were \$3,501,609. The cost per K. W. H. sold averaged .062 mills per K. W. H. varying from a minimum of .0028 mills to a maximum of 7.5 mills per K. W. H. for individual companies. Eliminating extreme figures the range was from .0156 mills minimum to 1 mill maximum.

The expense per customer averaged \$2.74 with a minimum of 11 cents and a maximum of \$6.70. Eliminating extreme figures the range is from a minimum of \$1.14 to a maximum of \$3.74 for individual companies.

This expense being directly proportional to the number of consumers the cost is allocated to each rate schedule on a per customer basis of \$2.74 per consumer.

This cost being an annual charge it is allocated to the rate schedules as a service charge as referred to heretofore.

NEW BUSINESS DEPARTMENT OPERATING EXPENSES

This expense is the basis for intangible or going value. The costs are governed by the judgement of the management and justified by future earnings. Existing consumers are not responsible for the expenditures and are affected only indirectly as the company may prosper by the addition of new consumers or by an increase in the load factor. To this extent they are vitally interested as either result will reflect in a lowering of the rate. Therefore these costs are a proper charge to the cost to serve. A method of governing

the expense of the New Business Department is the gross income, every business can expend a reasonable percentage of the gross income to promote or develop future growth.

The total expenditure for New Business Operating expenses for the year 1924 was \$1,587,967 or 1.2% of the estimated gross income (\$127,000,000) for the 80 companies covered by this report. For the larger companies the minimum being 0.6% and the maximum 2.1%.

On a K. W. H. basis the average cost was 0.0282 mills per K. W. H. The minimum cost was 0.0096 mills and the maximum 0.18 mills per K. W. H. Eliminating extreme figures the range varied from a minimum of 0.02 mills to a maximum of 0.062 mills per K. W. H. The K. W. H. sold controlling the gross income this expense is allocated on the basis of per K. W. H. sold and amounts to a cost of 0.0282 per K. W. H.

GENERAL ADMINISTRATION EXPENSES

The total cost of administration operating expenses for the companies covered by the report for the year 1924 were \$1,490,002, or slightly less than 1% of the total fixed capital of the companies.

The average expense per K. W. H. sold was 0.8 mills, the maximum expense for any one company was 1.54 cents and the minimum 0.258 mills per K. W. H. Eliminating extreme figures the maximum was 6.6 mills and the minimum 0.332 mills per K. W. H.

Of the total administration operating expenses 25% is accounted for in the allocation of generating costs, 10% in transmission costs and 10% in distributing costs, leaving a balance of 55% or \$2,240,000 unaccounted for.

The executive functions to administer a property in addition to the major items accounted for, are of a general nature and cannot be readily classified, the expenses applying quite consistently to all rate schedules, proportionately to their gross earnings the balance of these expenses (\$2,240,000) are allocated to each rate schedule on a K. W. H. sold basis amounting to 0.04 mills per K. W. H.

OTHER GENERAL EXPENSES

The major items constituting this expense, namely, taxes, insurance and renewals and replacements are accounted for in the allocation of fixed charges as follows:

Generating System Expenses	6% of Fixed Capital
Transmission System Expenses	6% of Fixed Capital
Distribution System Expenses	6% of Fixed Capital

The fixed capital estimated for these items is as follows:

Generating System	\$235,063,920
Transmission System	100,000,000
Distribution System	191,184,550

Total	\$526,248,470
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The total expenditures covered by the classification of accounts as other general expenses for the year 1924, was \$18,487,204. The total amount accounted for in allocating fixed charges to the classi-

fication as above amounted to \$31,500,000 or \$13,012,796 in excess of the amount actually expended. Indicating that the allowance of 6% of the fixed capital to cover items classified under Other General Expenses is more than ample to cover in addition to taxes, depreciation (renewals and replacements) and insurance reserve accounts, such miscellaneous expenses as store expenses, garage and stable expenses, etc.

ANALYSIS OF FIXED CAPITAL

Apportioning fixed capital on the basis of \$120.00 per K. W. of generating capacity, \$10,000 per mile of transmission system including sub-station and \$150.00 per consumer for the distributing system amounts to a total of \$526,984,320, summarized as follows:

Generating System—Rated Capacity 1, 958,866 K. W.	235,271,770
Transmission System—10,000 Miles	100,000,000
Distributing System—1,274,597 Consumers	191,184,550
Total	\$526,456,320
Total Capital Costs per Reports	551,271,770
Available for Capital Requirements not accounted for	\$23,806,450

In apportioning the fixed capital as above stated, miscellaneous capital requirements such as office buildings, store facilities, transportation equipment, working capital, etc., for which fixed capital charges must be provided, no attempt is made to analyze these expenses in detail, the fixed charges resulting from this capital expenditure is for general utility purposes and applies to all rate schedules in practically direct proportions to the K. W. H. sold.

The allocation of this expense is therefore made on the basis of a fixed capital of \$25,000,000 with fixed charges at 13% to cover the fixed charges on miscellaneous capital expenditures, amounting to \$3,250,000.

The cost per K. W. H. sold (5,637,090,000) being .0577 mills is allocated to all rate schedules.

In apportioning this expense to the rate schedules no account is taken of earnings from other sources approximating \$10,000,000. The expenses incident to these earnings are absorbed as general expenses in the classification of accounts. These earnings should share there proper portion of such accounts as administrative and new business expenses in addition to general expenses.

LOSSES

The allocation of costs considered in the foregoing study covers all costs as classified in the annual reports of the companies in accordance with the uniform classification of accounts for electric companies and covers all costs with the exception of transmission and distribution losses.

In allocating the cost of this item the losses must be apportioned to the various rate schedules. The losses consist of transmission loss including sub-stations, distribution losses, including meter losses and unaccounted for loss.

Transmission losses apply to all schedules, the other losses apply to all schedules with the exception of primary power schedules. Transmission losses are variously estimated (see rate spread report) at from 4 to 18% with an average of 9%, and as transmission losses can be quite accurately ascertained the difference between total generated and purchased prime power less transmission losses must be the loss to be accounted for by secondary service. The average total losses stated in the reports vary from 7% to 41% omitting extreme figures the minimum loss is 8% and the maximum loss 26%.

A further analysis indicates that eliminating the companies supplying large proportions of their output to primary power consumers, the average losses will vary from 17% to 41%.

This data indicates that an allowance of 9% for transmission losses on all schedules, plus 25% for distribution losses, on all secondary service schedules, will be a reasonable average to allow for this item of expense. The cost of the losses being based on the cost of prime power generation will add 9% of the generating system operating expenses to the transmission system expenses in the allocation of costs on all schedules for primary power plus 25% on all other schedules.

The generating system operating expenses being 5.37 mills per K. W. H., the additional costs per K. W. H. for transmission system losses at 9% will be .0457 mills to be allocated to all primary power schedules. The additional cost per K. W. H. to apply to all schedules other than primary power service to cover distribution losses at 25% of the generating system operating expenses at 5.37 mills, will be 1.325 mills.

In accounting for losses the estimated percentage as given above was necessary as the data on losses for all companies is not available. It is however apparent that the allocation of losses is a simple matter for each individual company.

The K.W.H. of Prime Power Generated can be accurately ascertained and the total K.W.H. sold is available. Deducting total sales from K.W.H. output at the station buss represents losses or power to be accounted for. Of this quantity the transmission losses, if not available can be calculated with reasonable accuracy, deducting these losses from the total output less such power which can be definitely accounted for represents losses in distribution.

For example these figures for 2 companies generating the greater portion of the power sold is as follows:

Generated	1,364,653,000	1,073,738,000 K.W.H.
Purchased	none	20,202,000 K.W.H.
Total	1,364,653,000	1,093,940,000 K.W.H.
K.W.H. sold	1,209,043,000	958,376,000 K.W.H.
K.W.H. Unaccounted for ..	155,610,000	135,564,000 K.W.H.
Transmission losses		
(Est. at 5%)	68,232,650	54,697,000 K.W.H.
Distribution losses		
(Difference)	97,377,350	80,867,000 K.W.H.
% loss in distribution, etc.	8.5%	7.5%

In allocating costs to account for losses to the rate schedules, the actual losses are known and can be accounted for without assuming an estimated loss for the various classes of service, which is certain to account for losses far in excess of those actually occurring as indicated by the estimated averages of 9% for Transmission and 24% for Distribution as compared with the actual loss of 5% for Transmission and 8.5% for Distribution in the above example.

SUMMARY OF COST TO SERVE

In allocating the costs as covered in this analysis of the cost to serve to all the rate schedules, it will be noted that the rate schedules automatically are classified into four classes.

- A. Primary Service
- B. Distributed Service (Secondary Service)
- C. Special Service (Flat Rate, etc.)
- D. Off Peak Service (Power used in excess of the average demand)

A—Primary Service covers all classes of service delivered from transmission lines which do not use the distributing system of a company.

B—Distributed Service covers all classes of service not coming under Class A.

C—Special Service covers such schedules which include specific service not common to all consumers.

D—Off Peak Service automatically applies to all classes for the power used in excess of the average load factor.

Regrouping the schedules now in use for supplying electric service as classified at present, places them in the four classes as follows:

- Class A—Interchange power
 - Special Power Contracts
 - Wholesale Power (Primary)
- Class B—Residence or Domestic Light
 - Domestic Power
 - Commercial Light and Power
 - General Power
 - Wholesale Power (Secondary)
- Class C—Flat Rates
 - Miscellaneous Schedules
- Class D—Off Peak Power

The following tabulation of the allocation of costs to the various classes of rates approximate the cost to serve based on averages derived from the reports of 80 companies for the year 1924, representing 99% of the fixed capital and 97% of the K. W. H. generated by the electric power utilities of the State of Pennsylvania, based on an average load factor of 54% for the State.

ALLOCATION OF COSTS TO SERVE TO RATE SCHEDULES.

Item	Class A Rates Interchange Power			Class B Rates Commercial Ser- vice Secondary Power Service			Class C Rates Domestic Service			Class D Rates Flat Rate Service Special Service Street Lights			Class E Rates Ser- vice in Excess of Annual Lead Factor	
	Special Power Primary Power		Energy Cost per K. W. H.	Service Cost per Annum		Energy Cost per K. W. H.	Service Cost per Annum		Energy Cost per K. W. H.	Service Cost per Annum		Energy Cost per K. W. H.	Primary Power	Secondary Power
	Mills	Dollars		Mills	Dollars		Mills	Dollars		Mills	Dollars		Energy Cost per K. W. H.	Mills
Generation														
Syst. Operating Exp.	5.35	.....		5.35	.....		5.35	.....		5.35	.....		5.35	5.35
Fixed Charges	4.31	.....		4.31	.....		4.31	.....		4.31	.....		.....	.....
Administration Exp.	.02	.....		.02	.....		.02	.....		.02	.....		.....	.02
Total	9.68	.....		9.68	.....		9.68	.....		9.68	.....		5.37	5.37
Transmission														
Syst. Operating Exp.	.091	.....		.091	.....		.091	.....		.091	.....		.091	.091
Fixed Charges	.138	.....		.138	.....		.138	.....		.138	.....		.....	.....
Administration Exp.	.008	.....		.008	.....		.008	.....		.008	.....		.....	.008
Transmission Loss	.048	.....		.048	.....		.048	.....		.048	.....		.....	.048
Total	.285	.....		.285	.....		.285	.....		.285	.....		.147	.147
Distribution														
Syst. Operating Exp.	.....	.....		1.89	.....		1.89	.....		1.89	.....		.....	1.89
Fixed Charges per K. W.	.....	.....		.008	12.70*		.008	12.70		.008	12.70*		.....	1.89
Fixed Charges per K. W.	.....	.....		.....	.....		.008	.....		.008	.....		.....	.008
Distribution Losses	.....	.....		1.33	.....		1.33	.....		1.33	.....		.....	1.33
Total	.....	.....		3.228	.....		3.228	.....		3.228	.....		.....	3.228
Utilization														
Syst. Operating Exp.	.....	1.28		.....	1.28		.....	1.28		.....	1.28**		.....	.....
Commercial														
Dept. Operating Exp.	.....	2.74		.....	2.74		.....	2.74		.....	2.74		.....	.....
New Business														
Dept. Operating Exp.	.028	.....		.028	.....		.028	.....		.028	.....		.028	.028
Administration														
General Expenses	.04	.....		.04	.....		.04	.....		.04	.....		.04	.04
Other Gen. Expenses														
Miscellaneous Items	.057	.....		.057	.....		.057	.....		.057	.....		.057	.057
Grand Total	10.09	3.85		13.318	16.72*		13.318	16.72		13.318	16.72***		5.642	8.87

Notes:— *Plus demand above 1 K. W. @ \$12.70 per K. W.

**Plus cost of Special Service.

***Plus demand above 1 K. W. @ \$12.70 per K. W. and cost of special service.

APPLICATION OF COST ALLOCATION TO STATE WIDE SYSTEM

Total Fixed Capital \$551,271,770

System Expenses

Generating System Operating Exp.	\$ 38,828,721
Transmission System Operating Exp.	5,079,171
Distributing System Operating Exp.	6,856,878
Administration Expenses	4,490,002
Other General Expenses	18,487,204
Utilization Expenses	3,276,952
New Business Department Expenses	1,587,967
Commercial Department Expenses	3,501,604

Grand Total	\$ 82,107,499
7% Return on Fixed Capital	38,584,023

Total	\$120,691,522
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K.W.H. Sold

Primary Power (estimated)	2,000,000,000	K.W.H.
Secondary Power (estimated)	3,637,090,000	K.W.H.

Total (per P. S. C. Reports)	5,637,090,000	K.W.H.
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Total Number of Consumers at 1 K. W.	1,274,597	K.W.
Demand above 1 K. W. per Consumer	684,289	K.W.

Total Assessed Demand	1,958,886	K.W.
Capacity of Generating System	1,958,886	K.W.

Operating Revenue from Costs Allocated to Rate Schedules

Class A Rates	—2,000,000,000 K.W.H. @ 10.09	
	mills per K.W.H.	\$ 20,180,000
	Service Charge (Est.)	10,000
Class B & C Rates	—3,637,090,000 @ 13.318 mills per	
	K.W.H.	48,438,764
	1,274,597 K. W. Demand @	
	\$16.72 per K.W.H.	21,311,261
	684,289 Excess Demand @	
	\$16.72 per K.W.H.	11,442,312
Class D Rates	—Special Service (Estimated) ...	1,638,477

Allocated Gross Income	\$103,020,814
Selling Price 27% above Cost	27,815,619

Operating Revenue	\$130,836,433
Present Operating Revenue ...	\$130,000,000

CONCLUSIONS

The cost of serving a consumer must include a fair return on the capital invested, fixed charges and all expenses. The selling price must be sufficiently above this cost to attract new capital, encourage efficient management and establish a going value for the property.

The allocation of costs as analyzed assures a fair return and fixed charges based on the annual load factor and the K.W.E. demand of the consumer. It assures all expenses dependent on the K.W.H. sold and all expenses dependent on the K.W. demand of the consumers. It encourages long hours use and stimulates density of consumers. It automatically adjusts rates as the profits of the utilities are affected. The public and the utility share equally in the economics and efficiencies of the industry. It allows intelligent application of the regulatory functions of the Public Service Commission laws.

Applying this principle of cost allocation to existing rates, the following examples (the accuracy of which being limited to the data available) indicate the comparative net charge per K.W.H. to the consumer for each class of service of the following companies:

Barnesboro Sprangler Electric Light Company.
Penn Central Light and Power Company.
Scranton Electric Company.
Philadelphia Electric Company.
Philadelphia Suburban Gas & Electric Company.

In these examples the assessed demand for domestic service is $\frac{1}{2}$ K.W. per consumers which leaves an average demand of approximately 2 K.W. per consumer for commercial and secondary power service.

Allocating Costs to Barnesboro Sprangler Elec. Lt. Co.
Indicating percent increase or decrease to maintain present Operating Revenues
Domestic Service Assessed $\frac{1}{2}$ K.W. per Consumer

K. W. H. Generated and Purchased	6,367,000		
K. W. H. Sold	5,389,000		
Loss	1,278,000	K. W. H. = 18%	
K. W. Rated Capacity of Generating Plant	2,600	Capacity factor.....	66%
K. W. Peak	1,700	Load factor	45%
Fixed Capital per Annual Report	\$ 401,916	at 13% =	\$52,200
Apportioned to Generating	260,000	" " =	33,800
Apportioned to Transmission			
Apportioned to Distribution	141,916	" " =	18,500
Miscellaneous			
Generating Expense Operation	\$ 67,277	= 10.00	Mills
25% Administration	425	= .0635	"
Fixed Charge	52,200	= 7.8	"
Total	\$ 119,902	= 17.8635	
Transmission Expense Operation	None		
10% Administration	None		
Fixed Charges	None		
Loss Do not transmit power	None		
Total	None		
Distribution Expense Operation	\$ 11,427	= 2.12	Mills
10% Administration	170	.0315	"
Fixed Charges	33,800		
Loss 1,278,000	23,400	4.34	"
Total	\$ 68,797	6.5015	"
			\$15.75 per K. W.

Utilization Expenses	\$ 815	.38 per Con.
Commercial Expenses	5,220	2.45 " "
New Business Expenses	None	
Administration Expenses	1,700	.315 Mills
Other Expenses	None	
Total Gen. and Trans.	1.818¢ per KWH.—	\$ 2.83 per Consumer
Total Gen. Trans. and Dist.	2.468¢ per KWH.—	18.58 per K.W.

Earnings	Con- sumers	1000 KWH. Sold	Amt. Paid	Cost	+35% Selling Price	Per KWH.
Flat Rates	1	87.	\$2,992	\$2,992	\$2,992	3.4
Primary Service	None					
Sec. Power & Com.	536	4,848.	109,579	137,000	180,150	2.7
Domestic Service	1,590	454.	41,895	26,150	24,843	5.4
Total	2,127	5,389.	\$154,466	\$166,242	\$157,985	

Applying Cost Allocation to the Penn Central
Light and Power Company
Domestic Service assessed at $\frac{1}{2}$ K.W. Per
Consumer

K. W. H. Generated & Purchased	165,363,000	
K. W. H. Sold	121,267,000	
Loss	44,096,000	K. W. H. = 20%
K. W. Rated Capacity of Generating Plant	47,500	Capacity factor .....87%
K. W. Peak Load	42,700	Load factor .....44%
Fixed Capital per Report	\$9,224,037 @ 13% =	\$1,200,000 Fixed Charges
Apportioned to Generation	5,000,000 @ 13% =	650,000 Fixed Charges
Apportioned to Transmission	700,000 @ 13% =	91,000 Fixed Charges
Distribution	3,300,000 @ 13% =	430,000 Fixed Charges
Miscellaneous	224,037 @ 13% =	29,000 Fixed Charges
Generating Expenses Operation	\$816,208 = 4.95	Mills
25% Administration	53,000 = 0.33	Mills
Fixed Charges	650,000 = 3.95	Mills
Total	\$1,519,208 = 9.23	Mills
Transmission Expenses Operation	\$120,000 = 0.99	Mills
10% Administration	21,203 = 0.075	Mills
Fixed Charges	91,000 = 0.75	Mills
Loss 5% = 6,063,350 @ 9.23 Mills	55,964 = 0.45	Mills
Total	\$288,167 = 2.265	Mills
Distribution Expenses Operation	\$114,919 = 1.43	Mills
10% Administration	21,203 = .26	Mills
Fixed Charges	430,000	\$10.00 per K. W.
Loss 38,032,650 KWH. @ 9.23 Mills	350,000 = 4.35	Mills
Total	\$915,122 = 6.04	Mills \$10.00 per K. W.
Utilization Expense	\$12,119	.34 per Consumer
Commercial Expense	96,570	\$2.70 per Consumer
New Business Expense	52,000 = 4.3	Mills
Administration Expense	116,000 = 0.6	Mills
Other Expenses	29,000 = 2.4	Mills
Total Gen. & Trans.	1.312 Cents per K. W. H.—	\$ 3.04 per Consumer
Total Gen. Dist. & Trans.	1.916 Cents per K. W. H.—	13.04 per K. W.

Earnings	Con- sumers	1000 KWH. Sold	Amt. Paid	Cost	+ 40% Selling Price	Cents per KWH.
Flat Rate Service	53	1,800	\$67,300	\$67,300	\$67,300	3.75
Primary Power Service	5	39,200	478,033	515,000	721,000	1.84
Sec. Pr. & Commercial	5,655	69,047	1,820,928	1,119,000	1,566,600	2.25
Domestic Service	29,920	11,220	828,850	408,000	571,200	5.1
Total	35,633	121,267	\$3,195,111	\$2,109,300	2,916,100	

Applying Cost Allocation to the Scranton Elec. Co.
Domestic Service assessed at $\frac{1}{2}$ K.W. per Consumer

K. W. H. Generated & Purchased	168,536,735				
K. W. H. Sold	140,352,000				
Loss	28,184,735			K. W. H. = 17%	
K. W. Rated Capacity of Generating Plant	71,050	K. W. Capacity factor.....	56%		
K. W. Peak Load	36,200	K. W. Load Factor	52%		
Fixed Capital per Report	\$14,570,649	@ 13% =	\$1,886,100	Fixed Charges	
Apportioned to Generation	7,500,000	@ 13% =	970,000	Fixed Charges	
Apportioned to Distribution	6,250,000	@ 13% =	810,000	Fixed Charges	
Apportioned to Transuission	750,000	@ 13% =	97,000	Fixed Charges	
Miscellaneous	70,649	@ 13% =	9,000	Fixed Charges	
Generating Expenses Operation	\$1,102,312	=	6.55	Mills	
25% Administration	41,215	=	0.0245	Mills	
Fixed Charges	970,000	=	5.75	Mills	
Total	\$2,113,527	=	12.3245	Mills	
Transmission Expenses Operation	\$113,280	=	0.805	Mills	
10% Administration	16,485	=	0.118	Mills	
Fixed Charges	97,000	=	0.69	Mills	
Loss 5% % 8,426,836 K. W. H. @ 1.23 =	103,818	=	0.74	Mills	
Total	\$320,583	=	2.353	Mills	
Distribution Expenses Operation	\$422,847	=	9.85	Mills	
10% Administration	16,485	=	0.385	Mills	
Fixed Charges	810,000			\$15.00 per K. W.	
Loss bal.) 19,757,899 K. W. H. @ 1.23=	240,000	=	5.6	Mills	
Total	\$1,489,33		15.835	Mills	\$15.00 per K. W.
Utilization Expenses	\$82,127				1.50 per Consumer
Commercial Expenses	121,408				2.25 per Consumer
New Business Expenses	74,008	=	.525	Mills	
Administration Expenses	90,673	=	.65	Mills	
Other Expenses	9,000	=	.064	Mills	
Total Generation & Trans.	1.591	Cents per K. W. H.—\$ 3.75			per Consumer
Total Generation Trans. & Dist.	3.175	Cents per K. W. H.—18.75			per Consumer

Earnings	Con- sumers	1000 KWH. Sold	Amt. Paid	Cost	+35% Selling Price	Per KWH.
Flat Rate Service	27	4,276	\$196,151	\$196,151	196,151	4.56
Primary Power	125	99,573	1,929,567	1,590,000	2,146,500	2.14
Sec. Power & Commer.	10,210	24,329	1,583,452	972,500	1,312,875	5.35
Domestic Service	43,401	12,275	1,247,383	890,000	1,201,500	9.75
Total	53,763	140,352	\$4,961,949	\$3,648,651	4,856,026	.....

Applying Cost Allocation and adjustment in Selling Price to maintain present
earning of Philadelphia Electric Company
Domestic Service assessed at $\frac{1}{2}$ K.W. per Consumer

K. W. H. Generated & Purchased	1,364,653,000				
K. W. H. Sold	1,150,948,502				
Loss	213,704,498			= 15%	
K. W. Rated Capacity of Generating Plant	476,480	Capacity Factor	65%		
K. W. Peak Load	315,583	Load Factor	48%		
Fixed Capital per Report	\$199,593,485	@ 13% =	\$25,900,000	Fixed Charge	
Apportioned to Generation	60,000,000	@ 13% =	7,800,000	Fixed Charge	
Apportioned to Transmission	45,000,000	@ 13% =	5,750,000	Fixed Charge	
Apportioned to Distribution	58,000,000	@ 13% =	7,550,000	Fixed Charge	
Miscellaneous	36,593,485	@ 13% =	4,800,000	Fixed Charge	
Generating Expenses Operation	\$7,960,996	=	5.85	Mills	
25% Administration	191,446	=	0.14	Mills	
Fixed Charges	7,800,000	=	5.71	Mills	
Total	\$15,952,442	=	11.7	Mills	
Transmission Expenses Operation	\$754,741	=	0.62	Mills	
10% Administration	76,577	=	0.063	Mills	
Fixed Charges	5,750,000	=	5.25	Mills	
Loss 5% = 68,232,659 K. W. @ 1.17=	800,000	=	0.69	Mills	
Total	\$7,381,319	=	6.623	Mills	

Distribution Expenses Operation	\$1,339,518 =	3.21 Mills	
10% Administration	76,577 =	0.185 Mills	
Fixed Charges	7,550,000 =		\$22.30 per K. W.
Loss (Bal.) 135,471,848 K. W. @ 1.17 =	1,350,000 =	3.22 Mills	
Total	\$10,316,095 =	6.615 Mills	\$22.30 per K. W.
Utilization Expenses	\$1,759,931 (½ to nat rate) =	2.65 per Con.	
Commercial Expenses	1,046,565		3.80 per Con.
New Business Expenses	628,954 =	0.545 Mills	
Administration Expenses	421,176 =	0.364 Mills	
Other Expenses	4,800,000 =	4.25 Mills	
Total Generation & Trans.	2.34 Cents per K. W. H. —		\$ 6.45 per Consumer
Total Generation Trans. & Dist.	3.01 Cents per K. W. H. —		28.75 per Consumer

Earnings	Con- sumers	Sold 1000 KWH.	Amt. Paid	Cost	Selling Price — 25%	Per KWH
Flat Rate	221	41,559	\$1,587,435	\$1,587,435	1,587,435	3.7
Primary Power	140	735,366	8,301,504	17,250,000	12,837,500	1.75
Sec. Power & Com.	80,524	284,168	13,436,247	13,800,000	10,530,000	3.65
Domestic Service	252,075	89,854	6,421,814	6,320,000	5,746,000	6.4
Total	332,960	1,150,948	\$29,853,403	\$38,957,435	*30,514,935	.....

Allocating Costs to Philadelphia Suburban Gas & Electric Company indicating percent increase or decrease to maintain present operating Revenues
Domestic Service assessed at ½ K.W. per Consumer

K. W. H. Generated & Purchased	63,649,693	
K. W. H. Sold	52,107,469	
Loss	11,542,224	K. W. H. = 18%
K. W. Rated Capacity of Gen. Plant	33,340	Capacity factor .....54+
K. W Peak Load	18,600	Load Factor .....40%
Fixed Capital per Annual Report	\$14,701,015 @ 13% =	\$1,910,000 Fixed Charge
Apportioned to Generation	5,000,000 @ 13% =	650,000 Fixed Charge
Apportioned to Transmission	2,000,000 @ 13% =	260,000 Fixed Charge
Apportioned to Distribution	4,000,000 @ 13% =	520,000 Fixed Charge
Miscellaneous	3,701,015 @ 13% =	480,000 Fixed Charge
Generating Expenses-Operation	662,903 =	10.4 Mills
25% Administration	11,307 =	.16 Mills
Fixed Charges	650,000 =	10.2 Mills
Total	1,324,210	20.76 Mills
Transmission Expenses Operation	94,969 =	1.82 Mills
10% Administration	4,522 =	0.086 Mills
Fixed Charges	260,000 =	5.00 Mills
Loss 5% 3,182,484 K.W.H. @ 1.076 =	65,000 =	1.25 Mills
Total	424,491 =	8.156 Mills
Distribution Expense Operation	1,339,518 =	50.00 Mills
10% Administration	4,522 =	.17 Mills
Fixed Charges	520,000 =	19.70
Loss (Bal.) 8,359,740 K.W.H. @ 1.076 =	173,000 =	6.45 Mills
Total	2,037,040 =	56.62 Mills 19.70
Utilization Expenses	37,088	½ to flat rate = \$0.62
Commercial Expenses	57,606	2.20
New Business Expenses	21,820 =	.42
Administration Expenses	24,875 =	.48
Other Expenses	480,000 =	9.2
Total Generation & Trans.	3.901¢ per K. W. H. =	\$ 2.82 per Consumer
Total Gen. Trans. & Dist.	6.05¢ per K. W. H. =	22.52 per Consumer

Earnings	Con- sumers	Amt. 1000 KWH.	Paid Amt.	Cost	— 25% Selling Price	Per KWH.
Flat Rate	182	1,788	\$116,174	\$116,174	116,174	6.5
Primary Power	40	25,494	486,714	955,000	716,250	2.7
Sec. Power & Com.	4,844	18,159	880,466	1,266,000	949,500	5.2
Domestic Service	21,204	6,704	684,883	629,000	471,750	7..
Total	26,269	52,107	\$2,168,454	\$2,966,174	2,253,674	.....

In submitting this report due consideration is given to the evolution of the industry and it is recognized that the development of the business to its present importance could not have been accomplished by allocating costs to establish the selling price for rate schedules any more than the railroads could have developed the transportation system without discrimination.

It is also understood that consideration must be given to the abnormal consumer as, for example, service restricted to early morning hours or service which may create an abnormal peak during the hours of average use.

The report assumes that the industry has reached an economic development and a demand which eliminates all need of concession or subsidies, that its production costs are sufficiently below competitive sources, that all rate schedule can be based on the cost to serve and that discrimination to obtain favorable business need not be practiced.

The diversity of use by the consumers and the interconnection of systems has eliminated definite production on peak loads, therefore the offpeak consumer has lost his identity and as the domestic user as well as the industrial user spreads his demand for service over the same period, they should share equally in the economies to which they contribute.

The application of allocating costs to existing rate schedules confirms the fact that discrimination in rates exists and that service below costs is available to various classes of consumers, the loss being offset by excessive charges to those less favorably situated.

The allocation of costs on the principle outlined reduces costs of service to domestic or small consumers from an average of 7 to 10 cents to an average of 4 to 6 cents per K. W. H. and increases the cost to wholesale or large consumers from an average of $11\frac{1}{8}$ to $1\frac{3}{4}$ cents to an average of $1\frac{1}{4}$ to 2 cents per K. W. H.

The rate spread as between small and large consumers thus becomes three to one as contrasted with a rate spread of ten to one which is now common in the industry.

It will be noted in the examples of allocating costs to individual companies that the selling price in comparison with existing rates to obtain the same operating revenues varies from 40 per cent above to 25 per cent below the cost to serve which includes 7 per cent as a fair return on the fixed capital.

Considering the 7 per cent as profit there is sufficient margin above actual costs to maintain existing rates to large consumers. This loss in profit, however, must not be made up by increasing the selling price of other schedules but must be carried by the company until economies are effected which will reduce costs so that these rates will return the per cent of profits allocated to all schedules.

In conclusion it should be noted that the existing form of reports as submitted to the Commission by the companies should be modified so that cost allocation can be accurately accomplished. Particular attention should be given to a revision of the classification of fixed capital so that the amount of fixed capital for generation, transmission and distribution can be ascertained and a revision of the statistical data so that the load and capacity factor is properly reported.

APPENDIX XI

JOINT GIANT POWER COMMISSION OF NEW YORK, NEW JERSEY AND PENNSYLVANIA

MINUTES: OCTOBER 21—DECEMBER 21, 1925.
TO WHICH IS PREFIXED THE STATEMENT OF
GOVERNORS SMITH, SILZER AND PINCHOT
ANNOUNCING THE APPOINTMENT OF THE COMMISSION.¹

STATEMENT

By GOVERNORS SMITH, SILZER and PINCHOT
On the appointment of a
JOINT GIANT POWER COMMISSION

A new era has been reached in the generation and transmission of electric light, heat and power. Electrical energy is already being carried across State borders at numerous points throughout the nation. Plans have been developed for carrying this power in greatly increased volume and long distances through several States.

Light, heat and power companies in the sale of their securities point out the number of States which they serve with electrical energy. Facilities under common ownership in different states are being progressively and rapidly interconnected.

Electrical energy, passing, as it now does, from State to State, immediately enters interstate commerce, and such can only be regulated by the Federal Government through direct Congressional action or through the delegation of Congressional authority to the States.

What is true of the transmission of power between States generally applies to the States of New York, New Jersey and Pennsylvania, where power passes from one to the other at many points though as yet in comparatively small quantities. Plans, however, are being developed for the transmission of Giant Power from the coal mines of Pennsylvania and the water-power of New York unprecedented quantities to the industries and householders of these States and to those of New Jersey.

¹Letters from a commissioner representing New York and the observer representing Vermont to the Secretary of the commission are added, as tending to authenticate the minutes.

Irrespective of what other States may do, it is the desire of the Governors of the States of New York, New Jersey and Pennsylvania that some action be taken to ensure the effective control and regulation of sompanies doing an interstate business in electricity, in order that they may be compelled to provide adequate service at reasonable rates. Unless some action is taken the individual state will soon be absolutely helples. If Congress should on its own initiative provide a system of Federal regulation as in the case of the railroads, the States will will have little to say as to the service these interstate companies shall render or the prices they shall charge.

The only safe course is for the States to act now themselves. The United States Constitution in the Compact Clause has provided a method whereby this can be done. This clause permits two or more states to enter into a compact, which must be ratified by Congress. When this has been done, the States will be able to regulate these interstate electric companies as they now regulate utility companies operating exclusively within ther own borders.

With this purpose in mind, the three Governors have this day appointed a "JOINT GIANT POWER COMMISSION of New York, New Jersey and Pennsylvania", whose duty it will be to study this question, make such recommendations as they may deem adviseable, able,prepare a compact to be entered into by the three states, and to make a report to the Governors of the respective States previous to the next session of the Legislature.

The Commissioners from the three States are as follows:

NEW YORK

William A. Prendergast, Chairman, New York Public Service Commission.

George R. Lunn, Member, New York Public Service Commission. Charles R. Vanneman, Chief Enggineer, New York Public Service Commission.

NEW JERSEY

Dr. Charles Browne, of Princeton, N. J., Member of the Board of Public Utility Commis- of the Board of Public Utility Commissioners of New Jersey. Mr. Issac Alpern, of Perth Amboy, N. J., President of the Perth Amboy Trust Co., a Director in other financial institutions, and a well-known business man of New Jersey, Mr. Robert F. Engle, of Beach Haven, N. J., former member of the State Board of Commerce and Navigation, and a well-known citizen and business man.

PENNSYLVANIA

Philip P. Wells, Deputy Attorney General and Chairman, Pennsylvania Giant Power Board.

Clyde L. King, Secretary of the Commonwealth and member Pennsylvania Giant Power Board. Morris L. Cooke, Consulting Engineer, Director, Pennsylvania Giant Power Survey and member Pennsylvania Giant Power Board.

GOVERNOR PINCHOT said:—

The appointment of a Joint Giant Power Commission representing the three states of New York, New Jersey and Pennsylvania means a real step forward in development of State policy of modern

large scale electrical development. Through tri-state action we seek to prevent monopoly profits and secure decent electric rates to consumers.

It is hoped to have the draft of a compact ready for submission to the regular 1926 session of the New York and New Jersey Legislatures and to the special session of our legislature should one be called.

Following the failure of the 1923 Pennsylvania legislature to authorize this inter-state inquiry I appointed a Giant Power Board composed of state officials and a consulting engineer. This body has been continuing the studies into this all important matter which we have been making in Pennsylvania for three years past.

The Pennsylvania members of the Joint Commission are members of the Pennsylvania Giant Power Board and have been designated for this service by that body.

Released October 26, 1925.

JOINT GIANT POWER COMMISSION
MINUTES of the FIRST MEETING
HELD at PRINCETON, NEW JERSEY,
SATURDAY, OCTOBER 31, 1925

The Governors of New York (Alfred E. Smith), New Jersey (George S. Silzer) and Pennsylvania (Gifford Pinchot) having on October 26, 1925, caused to be designated representatives of said three states (in these minutes hereafter called the contracting states) respectively, as follows:—

For the State of New York:—

William A. Prendergast
George R. Lann
Charles R. Vanneman

For the State of New Jersey:—

Charles Browne
Isaac Alpern
Robert F. Engle

For the Commonwealth of Pennsylvania

Morris Llewellyn Cooke
Clyde L. King
Philip P. Wells

to constitute the Joint Giant Power Commission of New York, New Jersey and Pennsylvania (in these minutes hereafter called the Joint Commission) for the purposes of studying the question of the regulation of the interstate transmission of electricity for light, heat and power, of making such recommendations thereon as they

may deem advisable, of preparing a compact to be entered into by the three contracting states, and to make a report to the Governors of their respective states, previous to the next sessions of the Legislatures;—

The first meeting of the Joint Commission was held, on the invitation of Dr. Charles Browne, in Princeton, New Jersey, at the Princeton Inn, at 1:15 P. M. Saturday, October 31, 1925.

Present:

For the State of New York—Commissioners Prendergast and Vanneman;

For the State of New Jersey—Commissioners Browne, Alpern and Engle;

For the Commonwealth of Pennsylvania, Commissioner's Cooke, King and Wells.

Upon the suggestion of Commissioner Cooke, Commissioner Prendergast undertook the duty of temporary chairman.

Voted unanimously: That Charles Browne be the Chairman of the Joint Commission.

Commissioner Browne thereupon took the chair.

Voted unanimously: That William A. Prendergast be Vice-Chairman, and Philip P. Wells Secretary of the Joint Commission.

Thereupon the Chairman appointed Commissioners Engle, Vanneman and Wells, members of the Executive Committee.

Commissioner Prendergast stated that the Public Service Commission of New York, anticipating the negotiation by the three contracting states of a compact for the control of interstate electric transmission, had caused to be undertaken a study of the laws of the three states bearing on the subject; also a study of the resources of and of the existing hydro-electric and steam-electric developments in New York; and that the results of these studies would be submitted to the Joint Commission about November 15th.

Commissioner Cooke suggested that the compact be so drawn as to become effective when ratified by any two states and approved by Congress; and so drawn that other adjoining states can later join in it by legislative action and Congressional approval; also that adjoining states should be requested by the Governors of the three contracting states to appoint observers to cooperate with the Joint Commission.

Voted unanimously: That, for the purpose of securing the cooperation and criticism of the adjacent states with a view to protecting their several interests and of inviting their future joinder in the proposed compact, the Commissioners of each of the three contracting states be instructed to suggest to the Governors of their respective states that they severally request the Governors of the non-contracting states upon their borders each to appoint a representative to act with the Joint Commission as observers and advisers for their several states, that is to say: Such request to be made by the Governor of New York to the Governors of Vermont, Massachusetts and Connecticut; by the Governor of New Jersey to the Governor of Delaware; by the Governor of Pennsylvania to the Governors of Maryland, West Virginia and Ohio.

After discussion it was informally and unanimously agreed that responsibility for the compilation and graphic presentation of data for the three contracting states to be furnished by each of them for the use of the Joint Commission be assumed as follows:

By Commissioner Vanneman: Territorial rights of corporate groups; existing 66,000 volt lines by corporate groups; existing interstate transmission lines by corporate groups.

By Commissioner Engle: Installed generating capacity (excluding stations of less than 5,000 kw. capacity) by corporate groups.

By Commissioner King: Power resources and power markets.

Commissioner Wells suggested that a preliminary to the drafting of a compact should be the determination by the Joint Commission of the principles to be embodied therein and that the Executive Committee should, and the Commissioners of each of the three contracting states might well, formulate a statement of such principles for the consideration of the Joint Commission.

The Chairman called a meeting of the Executive Committee to be held at noon on November 9th, 1925, at the Princeton Club in New York City.

Thereupon at 3:45 P. M. the Joint Commission adjourned to meet at the call of the Chairman.

A True Record. Attest:

PHILIP P. WELLS
Secretary

MINUTES OF THE SECOND MEETING

The Second Meeting of the Joint Commission was held at the University Club in Philadelphia on Saturday, December 5, 1925, at 11:00 o'clock a. m.

Present:

For the State of New York—Commissioners Prendergast, Lunn and Vanneman.

For the State of New Jersey—Commissioners Browne and Engle.

For the Commonwealth of Pennsylvania—Commissioners Cooke, King and Wells.

There also met with the Joint Commission the following observers and advisers:

For the State of Vermont—Edward H. Deavitt.

For the State of Maryland—Harold E. West.

The minutes of the meeting of October 31, 1925, were read and approved.

The Executive Committee submitted its report dated December 5, 1925, which was read as a whole, as follows:—

The Executive Committee met in New York at the Princeton Club as the guests of Chairman Browne on Monday, November 9, 1925, at 12:00 o'clock. Commissioner Prendergast met with the Executive Committee.

It met again in New York on Monday, November 23, 1925, at 12:15 p. m. at the Union League Club as the guests of Commissioner Prendergast. Commissioners Prendergast and Cooke met with the Executive Committee.

At these meetings there was general informal discussion as to the principles which should be embodied in the proposed compact. At the first meeting certain principles suggested by Commissioner Cooke were discussed. At the second meeting the discussion centered upon a statement of principles submitted as tentative proposals by the Pennsylvania commissioners under date of November 18, 1925.

The Committee agreed upon and recommend for consideration the following Articles as principles to be embodied in the compact;—

I. AREA:

The geographical limitations of practicable transmission and the many objections to over centralization both suggest a limit upon the ultimate compact area. The primary prospective area should be the three contracting states with New England, Delaware, Maryland, the District of Columbia, West Virginia and Ohio.

II. ADHESION BY STATES:

Every state within the primary prospective area and contiguous to the compact-bound area should have an option to ratify the compact at any time in the future and thereby, upon the approval of Congress, to become a party to the compact.

The Joint Tribunal proposed by Article III hereof should have power by a two-thirds vote to admit as a party to the compact any other State which shall have ratified the compact by a legislative act, which is contiguous to the compact-bound area, and which exports to or imports from said area electric current to the amount of five per cent (5%) of the production (or consumption) of such ratifying State; such vote to be cast within six months after such ratification, and such admission to take effect upon the approval of Congress thereafter.

The compact should, as to the States ratifying it, take effect upon ratification by any two of the three States now negotiating.

III. JOINT TRIBUNAL:

There should be a joint tribunal to make effective the terms of the compact. It should be composed of one representative from each State until the compact-bound states exceed seven. Upon the happening of any such excess and thereafter the joint tribunal should consist of seven members as follows:—One from each of the two States producing the greatest quantity of electric current, one each from the three other States consuming the greatest number of kilowatt-hours, and two others, one from each of two of the remaining States, rotating in the order in which such states ratified the compact.

The member of the Joint Tribunal from each State should be a member of the Public Service Commission thereof designated by the Governor thereof.

The term of the members of the Joint Tribunal should be two (2) years until the number of the compact-bound States exceeds seven (7). Upon the happening of any such excess the term of the member representing that one of the seven States first ratifying which ratified last should expire at the end of the year of his term next following the happening of such excess, and he should be succeeded by a representative of the State which was the eighth to ratify. Thereafter the terms of all members, except those designated to serve out an unexpired term in case of vacancy, shall be two (2) years.

The Chairman of the Joint Tribunal should be elected annually by a majority vote of the members.

IV. REGULATION OF SERVICE STANDARDS:

The Joint Tribunal should have power to regulate the service standards of inter-state electric utilities as arbitrator of disputes between the Commissions of any two compact States as to electric utilities between them.

V. EXPENSES OF THE JOINT TRIBUNAL:

The expenses of the Joint Tribunal should be apportioned among the compact states in proportion to the number of kilowatt hours consumed by them not exceeding \$———per million kwh. They should be a first claim on the appropriations made by each state for public utility regulation.

The following matters were also discussed but no agreement reached about them:—Subject matter to be regulated as inter-state business; Scope of regulation of such business; Segregation of inter-state transmission; Rate-Base, Security Issues and Fair Return; Uniformity of Rate Structures; Incorporation of Interstate Electric Utilities.

It was agreed that each of the three states negotiating should submit its view in writing for the consideration of the Joint Commission at its next meeting as to principles not agreed upon by this report; also that each state should be free, upon further consideration to submit differing views as to any of the principles agreed upon and embodied in this report.

The Executive Committee recommended to Chairman Browne that he call a meeting of the Joint Commission at the University Club in Philadelphia at 11:05 a. m., Saturday, December 5, 1925.

The Executive Committee recommends that after the adoption by the Joint Commission of a statement of principles that should be embodied in the compact there be held in each of the three states public hearings at which discussion and criticism of such principles be invited.

Respectfully submitted,

Charles Browne
Charles R. Vanneman
Robert F. Engle
Philip P. Wells

The Articles proposed by the report of the Executive Committee as principles to be embodied in the compact were then read for discussion and amendment, article by article.

Article I was amended by inserting the word "the" before New England, and the word "States" after New England in the second sentence so to make the phrase read "with the New England States".

At this point Commissioner Prendergast raised the question as to the necessity for a compact, which was discussed at length by all the Commissioners and observers present until recess was taken for luncheon at 1:15 P. M. Commissioner Prendergast argued strongly against a compact on the grounds:—first, that a receiving state can now control adequately current transmitted to it from other states; second, the the quantity of interstate current is less than four per cent and therefore too small to call for special methods of control; third, that one method is by Act of Congress constituting the State Commissions Federal agencies for the regulation of interstate electric transmission subject to control by the Interstate Commerce Commission, after the manner of the bill for control of interstate motor traffic proposed by the National Association of Railroad and Utility Commissioners for introduction in the 69th Congress.

All these reasons were disputed by Commissioners Cooke, King and Wells. Commissioner Cooke doubted that the quantity of current transmitted over state lines was as low as four per cent in view of the fact that the percentage for Pennsylvania was exports seven per cent, imports eight per cent. He asked for the source of the figures. Commissioner Prendergast replied that the source was the National Electric Light Association. He produced a memorandum of the data furnished by that Association showing amount generated and amount transmitted across State lines by a number of regions, the total for all regions being 54,000 million kwh. generated and 1,820 million kwh. transmitted across State lines, or 3.4%.

Commissioner Prendergast suggested that a preliminary public hearing be held on the question whether there should be a compact or not in order to get the weight of public opinin. Commissioner Browne said at such a hearing, where no concrete proposals were put forward, the only persons who would appear would be representatives of the electric companies and specialists on the subject, and that the former would be fearful of any new plan of regulation.

After recess it was agreed to proceed with the reading and discussion of the report of the Executive Committee as if there were to be a compact, postponing the question as to whether or not there should be one.

The reading and discnsion of the Articles of the report of the Exeutive Committee, Article by Article, was resumed.

Article II was amended by striking out the period at the end thereof and adding the words: "and approval of Congress".

Articles III, and IV were approved without amendment.

Article V was amended by striking out the least sentence.

The Secretary then snbmitted "Further Tentative Proposals by the Pennsylvania Commissioners" dated December 5, 1925, in twelve Articles as follows:-

I. AREA. (Identical with ARTICLE I of Report of Executive Committee).

- II. ADHESION BY STATES. (Identical with ARTICLE II of Report of Executive Committee).
- III. JOINT TRIBUNAL. (Identical with ARTICLE III of Report of Executive Committee, with reservations as to restrictions upon appointing power of the several State Governors).
- IV. REGULATION OF SERVICE STANDARDS. (Identical with ARTICLE IV of Report of Executive Committee).
- V. EXPENSES OF THE JOINT TRIBUNAL. (Identical with ARTICLE V of Report of Executive Committee.)
- IV. REGULATION OF ACCOUNTS, RATES, SERVICE, AND SECURITY ISSUES.

(1) *Regulation of the whole system containing any major interstate line.* The Joint Tribunal should regulate all the accounting, rates, service and security issues of every corporation or person (hereinafter called interstate electric utilities operating, owning, or leasing an interstate electric line of 1000 kw. capacity within the compact-bound area, or a like line transmitting current to the amount of 100,000 kwh. per year, if current is transmitted over either of such lines in or for use in public service.

(2) *Segregation of major interstate lines.* Any such company which also generates and/or distributes current should have the right to segregate, into a separate corporate ownership, and thereby limit the jurisdiction of the joint tribunal to, its interstate transmission business within the compact area; and any compact-bound state should have power to require any such company operating within it to so segregate its interstate transmission business.

(3) *Concerns selling to interstate lines.* The Joint Tribunal should also regulate the accounting, rates and service of all generating and selling concerns delivering, within the compact area, to concerns doing such interstate transmission business, current for such interstate transmission, so far as such regulation is necessary to prevent discrimination among the compact-bound states as to service or rates, to insure the fullest practicable conservation and use of energy sources, and to insure for consumers in the receiving States adequate service and just and reasonable rates.

VII. RATE-BASE, SECURITY ISSUES AND FAIR RETURN.

(1) *Rate-base.* In the regulation of rates the Joint Tribunal should take as the presumptive rate-base the actual investment (measured in dollars) prudently hereafter made and kept unimpaired (the same to be accurately defined in the compact), plus an approximation thereto as to (or plus the value as of this date of) investment heretofore made.

(2) *Security Issues.* The Joint Tribunal should limit security issues to a par value approximately equal to the presumptive rate-base. No-par securities should be prohibited.

(3) *Fair Return.* The Joint Tribunal should compute the fair return at such sum as, in its judgment, would enable a properly financed company under efficient management to pay prudently on its common stock dividends sufficient to keep it slightly above par in a normal market.

(4) *Accounting.* The Joint Tribunal should so regulate accounting as to make presumptive rate-base readily ascertainable from the utility's books.

(5) *Confiscation.* After the presumptive rate-base, the fair return and the rates shall have been fixed by order of the Joint Tribunal the said Tribunal should upon demand of the utility take such other and further procedure, if any, including the ascertainment of the then value of the utility's property, as may be necessary to comply with the controlling rulings of the courts, as to ascertainment of the rate-base, against confiscation of the property.

(6) *Acceptance of Presumptive Rate-Base.* The construction or enlargement of any interstate facilities, and the enlargement of any existing interstate business over facilities now existing should be prohibited to any interstate utility, being a corporation, which shall not have filed with the Joint Tribunal an agreement to accept as conclusive the presumptive rate-base properly taken by the Joint Tribunal under section one of this Article.

VIII. RATE STRUCTURE.

(a) *Cost as the Basis for Rates.*

Cost is recognized as affording the basis of electric rates. But as a means of securing business both profitable to a given utility and advantageous to all rate classes, the joint tribunal shall have power to allocate any or all costs equitably among the several rate classes.

(b) *Uniformity of Rate Structure.*

The rates of each interstate utility should be of uniform structure as to each rate class throughout its territory. Such rates should be regulated on the basis of generation and transmission cost of all rate classes. Transmission costs are to be arrived at by 50 mile increments. Distribution costs, if any, to be separately computed as to each rate class.

* IX. INCORPORATION OF INTERSTATE ELECTRIC UTILITIES:

(1) The Joint Tribunal should have power to incorporate by a two-thirds vote interstate electric utilities (?)

(2) Every interstate electric utility, if a corporation, should be incorporated (by the Joint Tribunal or?) by one of the compact-bound states.

X. HOLDING COMPANIES:

(1) *Restrictions on voting of stock held.* No company or business trust not incorporated (by the Joint Tribunal or ?) by one of the compact-bound States, and no director,

officer or agent thereof should vote any stock of any interstate utility.

(2) *Process runs into all compact-states.* The orders of the Joint Tribunal requiring testimony, the production of books and papers, and the like should have full effect throughout all the compact states.

(3) *Contracts with servient utility.* All contracts between holding company and servient utility should be reasonable and as profitable to the servient company as a like contract with a stranger should be. The burden of proving such reasonableness and profitableness shall be upon the servient utility.

XI. INTERLOCKING DIRECTORS:

No director, officer, agent or employe of a company barred by Article X from voting the stock of an interstate utility shall be a director of any such utility.

XII. TAXATION:

The compact should not affect the taxation of interstate utilities.

The "Further Tentative Proposals" were taken up. The Secretary explained that the Pennsylvania Commissioners had submitted, under date of November 18, 1925, tentative proposals (eleven articles) to the Executive Committee at its meeting held November 21st; that five of the Articles had been discussed, somewhat amended and, as amended, had been incorporated in the report of the Executive Committee, being the five Articles already discussed and amended at this present meeting.

Commissioner Prendergast declared that, assuming that there is to a compact, he was opposed to the principles of regulation contained in Articles III, IV, V, VI, and VII of the "Further Proposals" and opposed to all related matters therein.

Some general discussion followed. Commissioner Wells called attention to the fact that it was agreed and recorded in the report of the Executive Committee that each of the three negotiating states should submit at the present meeting its views as to principles for embodiment in the compact; also that no contribution to the principles of a compact had since been brought forward by any other state either in writing or otherwise.

Commissioner Prendergast undertook to submit a statement of such principles in writing at the next meeting.

Commissioner Prendergast stated that he would like to have the Commission express its opinion upon the following question: Does the use of the name "Giant Power" in the title of this Commission or in any compact which might be arranged, carry with it an endorsement of the Giant Power Scheme advocated by Governor Pinchot? Commissioner Cooke replied that he did not see why there should be.

There was considerable discussion during the course of which Commissioner Wells read the announcement of the appointment of the Commission given to the Press by Governors Smith, Silzer and Pinchot October 26, 1925, wherein the Commission was so named. Commissioner Browne objected to the name as misleading. Several members suggested other names for the Commission. After further discussion Mr. Cooke suggested that the question be left for consideration at the next meeting, and on this there was unanimous agreement.

Discussion continued until, at 3:45 P. M. it was voted: That the Joint Commission adjourn to meet at the Cartaret Club, West State Street, Trenton, New Jersey, on Saturday, December 12, 1925, at 11:00 A. M.

A true record as approved
December 12, 1925. Attest:

PHILIP P. WELLS
Secretary.

MINUTES OF THE THIRD MEETING.

The Joint Commission met pursuant to adjournment at the Cartaret Club, Trenton, N. J., on Saturday, December 12, 1925, at eleven o'clock A. M.

Present the following Commissioners:—

For the State of New York—Commissioners Prendergast, Linn and Vanneman.

For the State of New Jersey—Commissioners Browne, Alpern and Engle.

For the Commonwealth of Pennsylvania—Commissioners Cooke, King and Wells.

Present also as observer and adviser for the State of Vermont:—
Mr. Edward H. Deavitt.

The Secretary presented a communication from Mr. West, observer and adviser for Maryland, regretting his probable inability to attend because of business in New York at this time.

Commissioner Prendergast submitted letters to the Governor of New York from the Governors of Connecticut, Massachusetts and Rhode Island, designating as observers and advisers the following named gentlemen:—

For the State of Connecticut—Mr. William E. Putman, 1010 Prospect Avenue, Hartford, Connecticut.

For the Commonwealth of Massachusetts—Hon. Henry C. Attwill, Chairman, Public Utilities for the Commonwealth of Massachusetts, Boston, Mass.

For the State of Rhode Island—Hon. William C. Bliss, Chairman, Rhode Island Public Service Commission, Providence, R. I.

Commissioner Prendergast also presented copies of his telegrams of December 11th to the Governors of Connecticut, Massachusetts and Rhode Island acknowledging receipt by reference of their said letters to the Governor of New York and giving notice of this meeting; also copies of his telegrams of December 11th to the said

observers and advisors for the said three states giving such notice; also reply telegrams to him dated December 12th from Mr. Putman and Mr. Bliss regretting their inability to attend because of previous engagements.

Said Governors' letters and said copies of telegrams by Commissioner Prendergast and original reply telegrams by Mr. Putman and Mr. Bliss were read and ordered on file.

The Minutes of the meeting held December 5, 1925, were read and ordered corrected as follows:—

Page 23, next line to bottom of page, strike out "the best" and insert in lieu thereof "one" so as to make the clause read "that one method is by Act of Congress" etc.

Page 4, lines 8 and 9. Strike out "between seven and eight" and insert in lieu thereof "exports 7%, imports 8%" so as to make the clause read: "the percentage from Pennsylvania was exports 7%, imports 8%."

Page 4, line 14. Fill the blanks so as to make the clause read: "being 54,000 million kwh. generated and 1,820 million kwh. transmitted across state lines or 3.4%."

Page 4, lines 19-23. Strike out the last sentences of the paragraph and insert in lieu thereof the following—Commissioner Browne said that at such a hearing where no concrete proposals were put forward the only persons who would appear would be representatives of the electric companies and specialists on the subject and that the former would be fearful of any new plan of regulation.

Page 4, line 31. Strike out "IV and V" and insert in lieu thereof "and IV," so as to make the sentence read: "Article II and IV were approved without amendment."

Page 4, Insert a new line following line 31, as follows: "Article V was amended by striking out the last sentence."

Page 7, line 7. Strike out "writing" and insert in lieu thereof "meeting," so as to make the phrase read: "at the present meeting."

Page 7, line 9. After "had" insert "since" so as to make the clause read "had since been brought forward."

Page 7, line 10. Strike out "the New York Commissioners" and insert in lieu thereof; "any other state" so as to make the phrase read: "by any other State either in writing or otherwise."

Page 7, lines 13 to 20 inclusive. Strike out the whole paragraph and insert in lieu thereof the following:

"Commissioner Prendergast stated that he would like to have the Commission express its opinion upon the following question: Does the use of the name or term "Giant Power" in the title of this Commission, or in any compact which might be arranged, carry with it an endorsement of the giant power scheme advocated by Governor Pinchot? Commissioner Cooke replied that he did

²The page and line numbers here given were those of the first manuscript draft of the minutes.

not see why there should be. There was considerable discussion during the course of which Commissioner Wells read the announcement of the appointment of the Commission given to the Press by Governors Smith, Silzer and Pinchot, October 26, 1925, wherein the Commission was so named. Commissioner Browne said that he objected to the name as misleading. Several members suggested other names for the Commission. After further discussion, Mr. Cooke suggested that the question be left for consideration at the next meeting, and on this there was unanimous agreement.

Said Minutes as so corrected were then approved.³

The question whether or not a compact is advisable was then taken up. Commissioner Vanneman submitted and read a memorandum in support of the negative of this question, which memorandum is attached to these Minutes and marked EXHIBIT "A."

Brief discussion followed.

Commissioner Prendergast then submitted and read a memorandum in support of the negative of this question, reserving the right to make corrections and changes therein. Said memorandum is attached to these minutes and marked EXHIBIT "B."

Commissioner Wells stated that the paragraphs numbered 4 and 5 under Part 5, sub-division C of the Memorandum were erroneous as to the alleged powers of the Pennsylvania Public Service Commission over security issues and over the acquisition of controlling interest in one utility by another; that the Commission does not have power to regulate security issues, nor power to prohibit any utility from acquiring any controlling right, title or interest in any other utility, but that it has power to veto the merger of any electric company into another by the purchase of all the rights, franchises and property of the one by the other.⁴

General discussion followed, after which the affirmative of the question was argued orally by Commissioners Cooke, King and Wells.

Mr. Deavitt asked whether a limitation of the compact to an experimental period of ten years could be considered. Commissioner Wells said that in his opinion such a limitation might be considered.

It was agreed that at the beginning of the next meeting the question of the advisability of a compact be voted upon and decided.

Thereupon at 3:50 P. M. it was voted to adjourn to meet at the Engineers Club, 32 West 40th Street, New York City, on Monday, December 21st at 11:00 A. M.

A True Record. Attest:

PHILIP P. WELLS
Secretary

EXHIBIT "A"

JOINT GIANT POWER COMMISSION Minutes of Meeting Held December 12, 1925. Memorandum By Commissioner Vanneman

In the matter of a compact between states respecting the transmission of electricity from one state to another.

³The corrected minutes thus approved are those above printed.

⁴See notes to these paragraphs on page 174.

I do not believe a compact between states is required at this time. I can not conceive that there will be any immediate need for a compact within a future time which at this moment can be forecast. If there be no reasonable need for a compact, there then can be no need for the construction of a form of compact. If a form of compact were devised which would not be needed for some extended period of time, it might easily be entirely improper or insufficient at the time when a compact might be necessary, if that ever comes. For this added reason the formulation of a suggested compact seems to be unnecessary. My contentions are based solely on the fact that I cannot see, either at present or for the immediate future, where any condition may arise which will adversely affect the public in any one state, which may not be easily handled by the means already at the command of the people, or by the enactment of very simple legislation either on the part of Congress or on the part of the states involved which will furnish regulatory powers supplementary to those already in existence.

To show the relative insignificance of the problem today, I submit the following: There were generated in the State of New York in the year 1924, 7,119,686,000 K.W.H.; at the same time there purchased 404,552,845 K.W.H., making a total of 7,524,241,845. During the same year there were sold in the State of New York 5,933,000,000 K.W.H., and there were exported from the State 86,459,504 K.W.H., making a total of sales of 6,019,459,504. There were imported 411,489,705 K.W.H.; the total of the exports and imports was 497,949,209 K.W.H. To show the significance of this, the total exports and imports represent 8.25% of the total sales; the total exports represent 1.43% of the total sales; the total imports represent 1.21% of the total kilowatt hours generated.

The exchange of power in the State of New York, meaning thereby the sending by one company to another of energy which later on is returned by the latter company and for which there is no actual payment on the part of either, is relatively very small. Over 300,000,000 K.W.H. of the imports are included within that energy sent from the generating stations in the Dominion of Canada, Province of Ontario, to the United States for resale by distributing corporations within the United States. I can not conceive that a condition of this kind demands at this time any form of compact. Beyond this, I am convinced that a practical consideration of the problem does not lead to the conclusion that there will be in the future an enormous transfer of electricity from one state to another. There may be, and I believe should be, an interchange of electricity between contiguous territories, but this interchange will come about largely through temporary necessities on the part of one plant or as a result of economic demands created by conditions within one state which do not exist in the other. These demands, I believe, will be subject to readjustments, so that the situation thus created would be sooner or later entirely wiped out.

As an illustration, one corporation might find it expedient, on account of demands made upon it for service, to purchase energy from an adjacent plant in an adjacent state in order to make up its defi-

ciencies. As the purchasing plant found its demand growing, and particularly if that growth were centralized in or near its existing generating station, good economics might dictate that this generating plant be enlarged, so that the necessity for purchasing from the adjacent state would ultimately disappear or be uneconomical, since a larger plant might, and probably would produce energy at substantially the same cost, or even less. In any event, transmission losses might be materially reduced, thereby making it additionally more economical to discontinue the interchange.

There is a further point in support of my contention that I am not a believer in the theory that there is going to be in the eastern section of this country a great deal of long line transmission. I believe that the losses to be incurred by the transmission of large volumes of electricity will ultimately be so great as to make the cost of the energy thus transmitted at the point of consumption more than the cost of producing an equal amount of energy by a proper prime moving source located at the point of consumption. To illustrate what I mean, I believe that it will be extremely difficult to transmit energy from the St. Lawrence River for consumption in New York City, which may be sold in New York City at a rate less than, or equal to, the rate which would be required for energy produced at plants located within the City. One factor which could be elaborated upon and which would take too long to discuss here, is the effect to be produced by the transformation of the energy from a possible 220,000 voltage to a lower one, and the transmission or distribution of this energy at a lower voltage within any municipality in the Metropolitan District. I believe that this latter phase of the problem carries with it costs which are not fully comprehended and which will make the cost of energy thus transmitted over long distances very high. I believe that cost will be much in excess of what it will cost to produce the energy within the Metropolitan area and distribute it.

I do not believe the mine mouth coal plant to be in any way a possibility to be considered in connection with the long line transmission for consumption in the Metropolitan District. The economic factors which are advanced as arguments for the mine mouth operation require the disposition of by-products already produced by existing industrial organizations in quantities which this country can absorb. If these by-products produced by mine mouth plants were unloaded with the regularity which mine mouth operation makes absolutely invariable, either the by-products must be sold at various competitive rates, or they must be stored. Of course they would be sold and their sale would involve the elimination of at least a part, if not all, of the existing industrial organizations. It is highly probable that unless tariff provisions regulated the sale of such by-products, imports from foreign countries would have a serious effect on the return which the mine mouth plant might get for its by-products. All of these, therefore, influence vitally the cost of the coal or by-product fuel used in generating electricity, and directly influence the cost of each kilowatt hour which may be sold.

These arguments, of course, are eliminating any consideration of the formation of a pool covering one or more states, from which any distributor may draw, as demands occur. Time does not here permit to discuss the ramifications of such a pool; I merely state that I do not consider this either economically or socially feasible; I believe it to be highly impracticable.

With these thoughts in mind, therefore, I can not make myself believe that there is at this time any necessity for a compact.

EXHIBIT "B"
JOINT GIANT POWER COMMISSION
Minutes of Meeting Held December 12, 1925.

Submitted by Mr. Prendergast December 12, 1925;
Revised and resubmitted to all Commissioners by his
circular letter dated December 17, 1925.

December 10, 1925.

Subject: Matter of electric power compacts, etc., between the
States of New York, Pennsylvania, and New Jersey.

STATE COMPACTS

1. *Interstate compacts require the approval of the Congress of the United States as well as that of all the states which are parties to the compact.*
2. *The enactment of a state compact is a difficult and unsatisfactory procedure.*

The difficulties involved are well illustrated by a recent attempt in which the same states here represented endeavored to make a compact.

Chapter 177 of the Laws of 1925 reads:

"AN ACT to adopt a compact made between commissions appointed by the Governor under a law of the Commonwealth of Pennsylvania, and commissioners appointed by the governor under a law of the state of New Jersey, and commissioners appointed by the governor under a law of the state of New York, for the purpose of conserving the water resources of the Delaware River and making allotments therefrom to the said states respectively and determining and adjusting their respective rights therein."

A similar act was introduced in the legislature of the state of Pennsylvania but no action was taken thereon before the adjournment of the legislature. The New Jersey Legislature appointed a commission to consider the subject.

It will be observed that the compact relating to the water resources of the Delaware River related to a very simple subject in comparison with an electric power compact. The sole purpose was to determine and adjust the rights of the three states in the water resources of the Delaware River.

To procure enactment of such a compact in the state legislature, undesirable compromises are frequently necessary,

and if the scope of the compact is not very narrowly limited, it generally fails to pass either through opposition, inadvertence or misapprehension.

3. *Any compact adopted now will not safeguard the future.*

(a) *Amendment.*

As has been pointed out, a state compact must be ratified by Congress before becoming effective. Thereafter the procedure for amendment is the same as on original enactment, namely, ratification by the legislatures of each of the states concerned, and approval by the Congress of the United States. In this connection it will be admitted by all that what is proposed to be here covered by compact, i. e., the electric power industry, is in a period of tremendous epoch-making development, so it is at once apparent that any legislation now will of necessity require amendment within a very short time.

(b) *Limitation of freedom of future action.*

Under the compact proposed we will legislate for the future. It needs no argument to convince anyone of the vices inherent in law making for the future based on conditions known to be unstabilized. To adopt the compact may and undoubtedly will seriously affect the future development and regulation of electrical power in any of the three states. New York State has not yet adopted a definite policy with regard to the development of power along the St. Lawrence. Can it commit itself to a compact limiting its future freedom of action? Pennsylvania's chief objective is the generation of electric power through coal. New York is chiefly concerned with the development of water powers. The Governor of Pennsylvania has already announced the "Giant Power" program. The State of New York will of necessity have to enter upon agreements with the Canadian Government and the Federal Government before it can commit itself, because at this time it cannot and does not know what will develop in its own power situation in the future.

4. *The compact will not add to the regulatory powers of any of the states.*

No interstate authority or super commission can have greater power in itself than the sum of the powers conferred upon it by the several states concerned. It is only when a part of the existing Federal authority is delegated to such a super commission, that anything is gained. Any part of its jurisdiction which a state gives up to an interstate body detracts just that much from the power inherent in the state making the grant, i. e., if the State of New York hands over certain of its regulatory powers relative to electric utilities, it necessarily divests itself of that part which is granted. The result of this must be that the other parties to the compact will have a part in deciding what a fair rate is in the State of New York. Many situations

resulting in unjust and undue discrimination to consumers in the various states become at once apparent because of the necessity of regulation on the company-wide basis by such super authority.

5. *A compact is not necessary.*

(a) *Direct legislation by Congress accomplishes everything a compact can.*

Congress will not, in ratifying such a compact, transfer its authority completely to another tribunal, but rather will *delegate* certain restricted powers. If the present public interest in the specific object is of great importance, it can as well be accomplished by the direct action of Congress at the solicitation of the states concerned. In other words, let the states concerned ask Federal legislation directly bearing on the present situation.

(b) *The interstate transmission of power presents no problems which cannot be adequately handled by the separate state commissions in New York, New Jersey and Pennsylvania.*

Each commission has had before it rate cases involving power supplied in part or in whole from without the State.

In few of such cases have the Commissions experienced difficulty in securing information necessary to a proper decision.

New York, New Jersey and Pennsylvania have all given their regulatory bodies the power to fix rates and service for all companies distributing electricity within their borders.

a The New York Commission has the following powers

1. It has complete jurisdiction over the manufacture, sale and transmission of electricity for light, heat or power and of all electric plants.
2. It has control over the issue of securities by utilities under its jurisdiction.
3. It has power to establish and maintain just and reasonable rates.
4. It has power to investigate the methods of manufacturing and distributing electricity and to order such reasonable improvements as are of public interest.

Under these powers, it is able to regulate in the interest of the citizens of New York the sale of any electricity brought into the state, except in one minor element of the problem.*

b The New Jersey Commission has the following powers:

1. It has complete jurisdiction over the manufacture, sale and transmission of electricity for light, heat or power of all electric plants.

*The word "minor" is used because of the very small number of instances found—W. A. P.

2. It has power to fix just and reasonable standards, classifications, regulations, practice or service to be furnished by any electric utility.
3. It has power to require a public utility to construct, maintain and operate any extensions of its existing facilities.
4. It has the power to pass upon any issue of securities by any public utility.
5. It has power to fix and maintain just and reasonable rates for electric service.

In other words, the New Jersey Commission has the same power to regulate the sale of any electricity sold within the State and also that which has been generated outside of the State, except in the same situation mentioned for New York State.

c The Pennsylvania Commission has the following powers:

1. It has complete jurisdiction over the rates and service of all electric utilities.
2. It has power to fix and maintain just and reasonable rates.
3. It has power to require any utility to maintain just, reasonable, safe, adequate and sufficient service.
4. It has power to supervise and indirectly regulate the issue of stock, trust certificates or any other evidences of indebtedness of any electric utility.⁵
5. It has power to prohibit any utility from acquiring any controlling right, title or interest in any other utility.⁶
6. By recent action of the Pennsylvania Legislature (Act of May 12, 1925, P. L. 587), the Pennsylvania Commission has authority to hold joint hearings with other State Commissions.

Under this law, the Commission seems to have full power and authority to hold joint hearings and issue joint or concurrent orders in conjunction or concurrence with any official power or commission of any State or of the United States, whether in the holding of such investigations or hearings or in the making of such orders, the Commission shall function under agreements or compacts between States or under the concurrent power of States to regulate interstate commerce.

To visualize the situation where lack of complete control and regulation is now apparent (New York and New Jersey), we must first consider,

⁵This is an error. The Pennsylvania Commission cannot control the issue of securities. See Opinion of Attorney General rendered October 2, 1925 to the Public Service Commission.

⁶This is an error. The Commission cannot veto the acquisition of control by stock ownership.

1. Power must be brought into a state in one of two ways:
 - a. By a company which generates power outside the state and distributes it itself within the State, or
 - b. By a company which generates power outside the state and wholesales this power by contract to another company within the State.

Where the same company generates and distributes the power, the regulatory body in the state where distributed seems to have complete authority; because, Congress not having acted, it remains, (although interstate commerce) subject to local regulation.

Where the distributing company purchases its power at wholesale at the state border from another company generating outside of the state, the contract of sale seems to be subject to the jurisdiction of the Commission in the state where the electricity is distributed.

The wholesale rate in that contract must be made known to the regulating body and is a factor in determining the rate which the distributing company may charge. But the Commission cannot, apparently, go back of the contract rate to inquire as to the reasonableness of the wholesale rate unless it can show such contract to be tainted with fraud or to be collusive.

Nothing seems to prevent, however, the regulatory commission of the generating state and the distributing state from coming together in an informal manner to compel an equitable rate by the separate exercise of their inherent power.⁷

And it is in this minor instance that additional power and jurisdiction are required. And based on all of our present knowledge of the situation, this is the only extra regulatory power not now possessed which would be given by a compact. As pointed out before, the Pennsylvania Commission now seems to have such power. If the other two states concerned would give similar authority to their regulatory Commissions, the objective sought would be reached at once. In any event, simple Congressional legislation giving State Commissions authority to hold joint hearings when the facts disclose the situation described, and to promulgate orders effective in each of the states concerned, would seem to solve the problem.

6. *By compact, State sovereignty is likely to be surrendered.*

Any other procedure than the regulation by each state commission of the power used within each separate state would be a surrender of state sovereignty. Under our present form of government the states have reserved to themselves the right to promote the welfare and the progress of their people. The tenth amendment to the Federal Constitution reads as follows:

⁷This is an error. See Public Utilities Commission of Rhode Island vs. Attleboro Steam and El. Co., decided by the Supreme Court of the United States January 3, 1927.

"The powers not delegated to the United States by the Constitution nor prohibited by it to the States are reserved to the States respectively or to the people."

Under the power to regulate interstate commerce, the Federal Government has, in many instances already invaded these reserved rights of the states and in each instance the assumption of regulation by the Federal Government over interstate matters has invariably resulted in a loss of the State's power over its own affairs.

The regulation of the railroads by the Federal Government has practically emasculated the power of the separate states to regulate railroads within their borders. Instead of supplementing the power of the States to regulate railroad traffic within their borders, Federal regulation has supplanted State authority.

Federal railroad regulation has even gone to the extent of regulating local rates in a single municipality. The assumption of authority by the Interstate Commerce Commission in connection with street railway fares is an example.

Furthermore, in its power to prevent discrimination in interstate commerce, the Interstate Commerce Commission has exercised complete power over intrastate rates, even where the points of origin and destination were within a single State and the freight never left the state.

7. *The single problem impending complete regulation is a minor one.*

Secretary Hoover in his address before the National Association of Railroad and Utilities Commissioners at its last convention in Washington, said:

"Furthermore, there has been outrageous exaggeration of the probable extent of interstate power. For economic reasons these power districts will in but few cases reach across State lines. There will be interconnections between systems of different States, but even including this the proportion of actual interstate movement in power to the intrastate movement will be comparatively small. *At the present time less than four per cent of the power generated passes State lines.*"

The records of the Department of Commerce at Washington indicate that at least half of the power crossing state lines is exchange power (that is, power where one K.W.H. is returned by a company in one state because that company has borrowed one K.W.H. from a company across the state line). Regulation is not concerned with a simple exchange of power. The balance, or two per cent of generated power, represents wholesale power transactions. How much of this falls within class "b" (See page

6)⁸ cannot definitely stated but it is fair to assume that considerably less than two per cent of the generated power is contract power within class "a" previously mentioned, for which regulation, or some procedure to facilitate regulation is needed.

8. *The problems concerning the three states are not the same.*

Agricultural states are concerned with the development of facilities of apply electrical power to the farm. Industrial states are chiefly interested in power for industrial purposes. In New York State, for example, where hydro-electric generation imposes the same fixed investment irrespective of the consumption of power, a different problem exists than in Pennsylvania where power must be chiefly produced by the use of coal. In cities, the investment for transmission is small when compared with rural communities where customers are further apart.

The "Giant Power" matter which in its most familiar aspect is ad emanand that electrical energy carried along high tension transmission lines be made available to farmers and others living in sparsely settled rural communities, involves an economic question and not one which concerns regulation, at least at this time. The solution is the invention or perfection of an inexpensive means of transforming such current so that it may be distributed at a reasonable cost and without the tremendous economic waste now involved. Regulation will not furnish an answer.

Conclusions.

A state compact provides a cumbersome and indirect method for correcting a minor deficiency in the present system of regulation; it is to be applied to conditions to be met in an unknown future; where those conditions are encountered, prompt relief is prevented by the compact, since amendment is as difficult as the adoption of the compact itself; it thus limits the freedom of future action, does not add to the regulatory powers of any of the states, is unnecessary, surrenders State sovereignty, and furnishes an entering wedge to complete Federal regulation of local problems.

MINUTES OF THE FOURTH MEETING

The Joint Commission met pursuant to adjournment at the Engineers Club in New York City, on Monday, December 21, 1925 at 11:00 A. M.

Present the following Commissioners:—

For the State of New York—

Commissioners Prendergast, Lunn and Vanneman.

For the State of New Jersey—

Commissioners Browne, Alpern and Engle.

⁸Power generated outside the State wholesaled by contract to a company within the State.

For the Commonwealth of Pennsylvania—

Commissioners Cooke, King and Wells.

Present also as observers and advisers for other states the following gentlemen:

For the State of Vermont—

Mr. Edward H. Deavitt.

For the State of Massachusetts—

Mr. Henry C. Attwill.

For the State of Maryland—

Mr. Harold E. West.

The reading of the Minutes of the last meeting was omitted.

Pursuant to agreement reached at the last meeting, the Chairman laid before the Joint Commission the question whether or not a Compact is desirable, to be decided by a vote, first as in committee of the whole, and finally by states, according to the procedure agreed upon at the first meeting of the Joint Commission.

Mr. Attwill inquired whether Congress could overrule a compact once having given its consent.

Mr. Wells replied in the affirmative, citing the Wheeling Bridge Cases in the Supreme Court of the United States.

Mr. Deavitt asked whether a state could at any time put an end to its obligations under the compact.

The Chairman replied that a state could do so if proper provision were made to the compact to permit such action.

Commissioner Prendergast said that before voting on the question of the desirability of a compact he desired to make a motion. Accordingly he moved that the states within the primary prospective area, as defined in the report of the Executive Committee submitted December 5, 1925, be asked to pass an act similar to the Pennsylvania act of May 12, 1925, P. L. 587 authorizing their respective public service commissioners to hold joint hearings with the commissioners of other states and with the Federal Power Commission, to issue joint orders, etc.

Mr. Attwill said that Massachusetts had been the first to propose regional regulation of Interstate Commerce by local commissions with a Federal representative sitting with them, an organization analogous to the Federal Reserve Bank; that the Motor Bus Bill recently proposed is somewhat in this line.

After some discussion of the motion, Commissioner Prendergast, in reply to Commissioner Cooke, stated that the enactment of such legislation would add no power to the existing powers of the state commissions. He said, however, that it would bring to bear the power of publicity and the power of cooperation.

The Chairman read tentative proposals of his own for consideration, as the basis of a compact.

Commissioner King moved that the Joint Commission now proceed to vote, first as in a committee of the whole, and then by states, on the question whether or not a compact is desirable.

Commissioner Prendergast, by unanimous consent, substituted the following motion for that previously made by him:—That it is the sense of this Commission that the states here represented and all others within the primary prospective area be asked to enact, as an alternative to a compact, legislation like the Pennsylvania act of May 12, 1925, P. L. 587.

Commissioner Lunn said that such legislation would not alone be an adequate alternative to a compact; that it should be accompanied by Federal legislation enlarging the powers of the state commissions.

Commissioner Cooke said that he would vote for such a recommendation to the states, as a part of the report of this Commission to the Governors of the three contracting states, but not as an alternative to the compact.

The Chairman said that the proposed legislation would be a good forerunner for a compact, but not a good substitute.

Commissioner Prendergast pointed out the difference between a compact and the proposed Motor Bus Bill, as to their form.

Commissioner Wells said that the difference was deeper than formal; that the Motor Bus Bill was an appeal to Congress to take the initiative, and therefore was the first step on a long road to control by a Washington bureau; that the compact method retained the initiative in the hands of the states. Commissioner Prendergast then withdrew his motion.

Commissioner Wells, in answer to a question by Commissioner Lunn, said that the Motor Bus Bill is not a compact; that it is general and uniform in its terms for the whole United States, rather than regional; that substantive, as opposed to procedural, laws governing Interstate Commerce and differing as between two or more regions, are perhaps beyond the power of Congress, and if not beyond its power, impossible of enactment.

Commissioner Lunn moved to amend Commissioner King's motion by adding thereto the following: "and that the compact should be so drafted as not to diminish by one iota the powers now exercised by the state commissions under present laws and regulations."

Commissioner King accepted the amendment.

Commissioner Engle seconded the motion as amended.

The Secretary called the roll, and the Commissioners voted as in a committee of the whole as follows:

Ayes: Commissioners Browne, Engle, Alpern, Lunn, Cooke and King—6.

Nays: Commissioners Prendergast, Vanneman and Wells—3.

Commissioner Prendergast explained his vote by saying that in his opinion the Lunn amendment would involve the formulation of a compact in impossible difficulties.

Commissioner Wells said that he concurred in this opinion, and had therefore voted in the negative.

Thereupon the vote upon Commissioner King's motion, as amended, was taken by states, and resulted as follows:

Ayes: New Jersey and Pennsylvania—2.

Nays: New York—1.

And so the motion was carried.

Commissioner Cooke asked what would be the attitude of the New York delegation in reference to proceeding to the drafting of a compact in view of the vote on the desirability of so doing.

Commissioner Prendergast replied that the New York commissioners had considered this question before the meeting, and had decided that they would not take part as members of the Joint Commission in the drafting of a compact.

Commissioner Cooke said that the Pennsylvania Commissioners desire to go ahead with the drafting of a compact, and to invite the New York Commissioners to act as observers and advisers for the State of New York, with respect thereto.

The Chairman extended such an invitation to each and all of the New York Commissioners.

Commissioner Prendergast said that he preferred not to take part but to take a clear-cut position in opposition to a compact.

Voted: That the observers and advisers heretofore and hereafter appointed for the several New England states, at the request of the Governor of New York, shall be deemed to be the observers and advisers for the said states respectively, notwithstanding the withdrawal of the New York Commissioners.

Voted on the motion of Commissioner King: That the Joint Commission do now adjourn, subject to the call of the Chairman.

Before the motion was put it was informally agreed that the Chairman and Secretary should be a Committee to draft a compact and submit it at the next meeting.

Thereupon at 2:30 P. M. the meeting adjourned.

Following the adjournment general informal discussion continued until 3:50 P. M.

Commissioner Cooke inquired what were the views of the observers and advisers of other states present at this meeting.

Mr. Attwill, putting aside the question whether Massachusetts would be out of consideration, because of the withdrawal of New York, thought that Massachusetts might favor a compact; that without some remedial measure, all effective control over utilities within the state would be taken over by Washington; that the remedy for such centralization was regional regulation; that he was not worried about theoretical loss of state sovereignty, because, in his opinion, the states have lost that already, and so fulfilled the prophecy of Patrick Henry when he opposed the adoption of the Federal Constitution.

Mr. West said that he was skeptical of any advantage to be gained by the state commissions acting under a compact, but if an act similar to the Pennsylvania statute of 1925 were passed by each of the states, much of the good to be expected from a compact would be obtained, and that he would recommend that such a statute be passed by Maryland.

Commissioner Deavitt said that Governor Billings of Vermont has considered the matter, and concurs with Mr. Deavitt in the opinion that a compact properly drawn would be of advantage; that one other adviser of the Governor was a contrary opinion; but that all agreed that Vermont would be against a joint tribunal in whose membership it was not represented at all times.

A True Record. Attest:

PHILIP P. WELLS
Secretary.

STATE OF NEW YORK
Public Service Commission
New York Office
120 Broadway
New York

July 12, 1926.

Mr. Philip P. Wells, Secretary,
Joint Giant Power Commission of
New York, New Jersey and Pennsylvania,
Department of Justice, Harrisburg, Pa.

Dear Mr. Wells:—

During the weekend just closed I examined the entire minutes of the Joint Giant Power Commission which you were good enough to send to me a short time ago. I think they are in good order and entirely as we agreed upon certain changes that should be made from time to time.

I want to thank you for the care you have taken to prepare what is not only a record of the minutes, but an excellent statement of our conversations and discussions.

With best wishes, believe me,
Very truly yours,

Wm. A. Prendergast,
Chairman.

STATE OF VERMONT
MONTPELIER

July 12, 1926.

Mr. Philip P. Wells, Sec'y.,
Joint Giant Power Commission,
Harrisburg, Pa.
Dear Mr. Wells:

I have your letter of the 8th inst., enclosing for the use of the State of Vermont a copy of the minutes of the meeting of the Joint Giant Power Commission, and I am very pleased to receive the same.

I certainly enjoyed and felt very much benefited by the meetings of your Commission and hope they may result in some tangible results.

Sincerely yours,

EDWARD DEAVITT,
Commissioner of Finance.

APPENDIX XII

TRI-STATE POWER MAP

PENNSYLVANIA - NEW YORK - NEW JERSEY

Compiled in the main from data furnished in 1925 by the Public Service Commissions of each State to

THE GIANT POWER BOARD

COMMONWEALTH OF PENNSYLVANIA

Capitol, Harrisburg, Pennsylvania

1926¹

Note: A statistical report prepared for the Giant Power Board by Ernest Bradford in 1925 on Power production and consumption in the three States and adjacent States (descriptive, tabular and graphic) was transmitted by Governor Pinchot to the General Assembly on January 4, 1927 with the report of the Board but is not printed.

¹This is a map in colors showing the territory in the three states controlled by the major holding companies. It is separately printed but will be distributed with this report.

